Handheld Mobile Technology in Libraries: A Study

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Abstract: - *Nowadays youths are seen at every place with their heads buried on to the mobile devices to seek information. Studies have shown that India is the second –biggest smart phone in terms of active unique smart phone users. The purpose of the study is to bring awareness to the librarians about recent developments in mobile technology and embrace the mobile initiatives for providing information services. The study also outlines what services can be given via mobile technology and how such services can be helpful to the user community and finally to explore the mobile library services initiated and adopted by some prominent academic libraries to actuate their existing services. The study also includes an exploration of various libraries which are aware of this mobile app technology and are using it for rendering library services. The examination of several case studies revealed that very few Indian libraries who have implemented the technology as compared to foreign libraries. The paper also presents the initiatives taken by these few Indian libraries in a nutshell.*

Keywords: Mobile technologies, Mobile Library Services, Mobile apps, Libraries

Introduction

With the advancement of Information Communication and Technology (ICT) and the inception of mobile technology in recent years, there is a change in the way people communicate and access information. Technological improvements such as cell phones, low cost connectivity and faster data transmission are among the most important factors which have led to the growing use of mobile devices (Villoldo & Salom, 2012). People are becoming increasingly incumbent on mobile devices for accessing, sharing and locating their information. Internet access from mobile devices has changed not only the way people communicate, but also has affected the way users search, retrieve and use information.

The number of Internet users in India is expected to reach 450-465 million by June [2018], up 4-8% from 432 million in December 2016, according to the Livemint report (2017) from the Internet and Mobile Association of India and market research firm IMRB International. Social media presents a good number of opportunities to the libraries and is reasonably well embedded in library communications.

An increasing number of library readers have started to access library resources and services through their mobile devices. This was recognized by librarians, who saw their users using their mobile phones instead of laptops and desktop computers to search on the catalogue, check the library's opening hours and maintain contact with library staff (Paterson and Low, 2010). Librarians quickly realized the need to provide library websites/Apps which could be searched easily via mobile devices. Libraries are changing their methods of service delivery and experimenting with the application of mobile technology for providing better services irrespective of the location and time. Librarians are increasing their awareness of the challenges this new technology posses both for the users and the libraries.

Mobile Technology in Libraries

Mobile Technology has now come up with the "Libraries in Hand" trend. Librarians are in the move to determine how these devices are affecting information access and ensure that they are communicating with users and providing web content in the most appropriate and effective ways. Librarians are using the mobile technology and putting in their efforts to increase the market and demand for mobile access to personalized facts and information anytime, anywhere on one's own handheld device (Vishwakarma, Maurya & Govil, 2013).

What is a Handheld device?

- Extremely portable, self-contains information management and communication devices.
- Small size and light weight, often made up of a single component.
- Operates without cables.
- Be easily used while in one's hand.
- Must allow the additions of applications and,
- Support internet connectivity

When one thinks of mobile technologies, the first device that comes to mind has to be the cell phone or the smartphone. Beginners to the smartphone in the library may want to consider a mobile-based website, a stripped-down design that reads well on small screens. These sites do not require too much web design knowledge (remember that well-designed mobile sites do not have complicated code or scripting languages) and can be designed in-house. Librarians can also consider the smartphone app, either as a stand-alone app (University of Notre Dame's Hesburgh Libraries) or as part of a university app (Duke University). Companies such as Boopsie, the designer of the American Library Association's conference apps, stand ready to make an app that can do anything

for your users—from searching the catalog to patron account information to basic library information. Many library resource providers, such as Westlaw, EBSCO, ScienceDirect, and RefWorks, have mobile apps or mobile sites that you can offer to more wired students (Kosturski and Skornia, 2011).

Librarians must be prepared to take up this challenge and will need to become proficient in using these devices to enable users to access them anywhere from anyplace. So, it is crucial for librarians to understand mobile devices and provide services through them.

Services through Mobile devices

Libraries can develop mobile apps for giving the following services

- Mobile library site
- OPAC
- Circulation services
- Reference enquiry services
- CAS/SDI
- Email and SMS service
- Distribution of e-resources through mobile site
- Library news events and blogs
- Library hours and library tours
- Mobile databases
- ILL service
- List of new arrivals
- Books and article search
- Subject guides, pathfinders
- Photo /video galleries
- Library surveys
- Suggest a purchase
- New title preview
- Feedbacks/comments/suggestions
- Ask a librarian

Advantages

Reasons why the library should go mobile:

- Time saving
- It is a personalized service
- It is user friendly
- Limitless access
- User Participation
- Location Awareness
- Ability to access information
- Providing students with freedom of location and time
- Students have access to campus information
- Mobile makes the content ubiquitous.
- Mobile enables to connect to patrons via a new medium.

Limitations

There are some limitations or barriers in providing library services:

- Digital rights management
- Limited memory of mobile devices
- Usually expensive and resource intensive
- Content ownership and licensing
- Reach of an external vendor into the digital collections and technologies – sustained access will be an extremely important issue for libraries if they adopt mobile Library technology and services

that offer content from providers outside of the library.

- privacy - because of the risk that patron usage information can be used and exploited those who commit identity theft.
- Lack of appropriate mobile-friendly academic content to meet learners' needs.
- Increasing staff reductions and other cutbacks
- The dearth of technological expertise among staff members

Skills required by the library staff

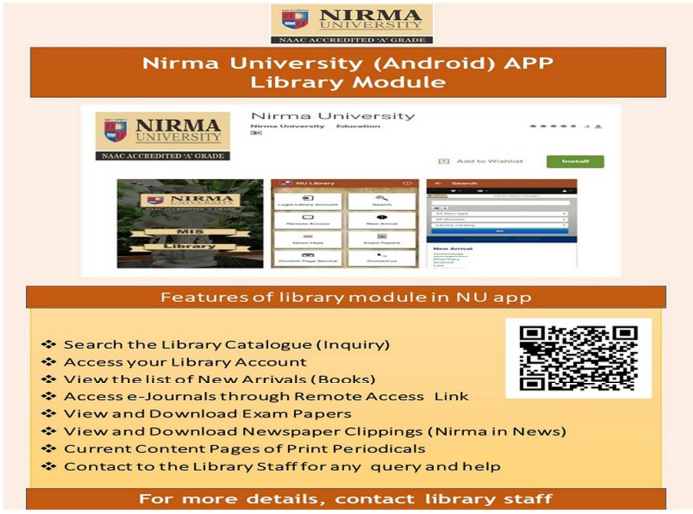
Librarians should acquire and apply the following skills if they wish to provide mobile based services:

- Sills relating to training and user orientation to market these services to users
- Skills for interacting with users via smart phone applications, mobile friendly web pages and third-party intermediary clients
- Knowledge of hardware and software of mobile devices.
- Develop expertise in protecting privacy and security levels as more personalized information is involved in using for library services.
- Familiarity with internet/intranet services like using e mail, SMS and spam preventing etc.

Librarians + Apps: a great combination!

Select Libraries in India having implemented mobile library services

1. **Nirma University Library App**



For easy access to the library NU libraries have been developed "NU Library App" for Android Mobile users. It is a part of Nirma University App.

Through this App, you can –

- Search the Library Catalogue (Inquiry)
- Login your Library Account
- View the list of New Arrivals (Books)
- Access e-Journals through Remote Access
- Link View and Download Exam Papers
- View and Download Newspaper Clippings (Nirma News)
- Current Content Pages of Print Periodicals
- Contact to the Library Staff for any query and help.

2. **IIT KGP has launched a mobile app for National Digital Library (NDL)**

An ambitious project of MHRD, NDL Android App is available for free and can be downloaded from Google Play Store. This repository can be accessed from anywhere in the world through the App or web versions. The App has features to search, browse, filter, tag, comment and metadata

view. The Desktop/Laptop (Web Client) however is enabled with the 'Advanced Search' feature.

NDL has already close to 9 lakh users with more than 1 lakh hits on the website. The App is expected to boost the accessibility and registered users. It has created a repository of more than 65 lakh publications in more than 100 languages. In addition to English, User Interface and Search is also available in Hindi and Bengali.

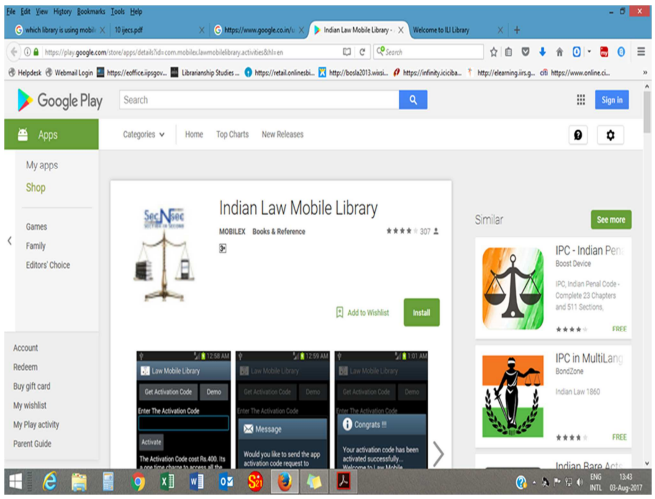
3. Sikkim University Central Library App

Sikkim University Central Library App has been developed to transfer their physical library to your most favourite device to explore your all library resources in printed and digital format. This library app facility will enable its users to keep this library on their hand-held device to use and refer to their resources whenever and wherever needed.

Main features of Central Library App: -

- Search and download the digital contents right from the app
- Login to your OPAC account to renew your books
- Get the latest library news
- Takes advantage of the responsive library website for seamless user experience

4. Indian Law Mobile Library App



Indian Law Mobile Library application is created by Madras High Court Advocates to access certain Indian Bare Acts on mobile phone. This app contains about 71 important Central Acts (as amended up to 2013 amendments) which can be referred in seconds without any network connection. It will be a ready reference to Judges, Advocates, and law college students.

The app is well designed in a user friendly manner; even a common man can access laws and provisions without the knowledge of law. After a severe scrutiny, this app is approved and purchased by several State Judiciaries, Honorable High Courts and State Legal Departments in India to its Judicial Officers and Legal Officers for their immediate law reference. Some of our app users are The Tamil Nadu State Judicial Academy - to all Judges in the state of Tamil Nadu, High Court of Gujarat – to all Judicial Officers in the state of Gujarat, Tamil Nadu Public Prosecution Department – to all Public Prosecutors and Assistant Public Prosecutors. etc. More than 2000 Judges including several Hon'ble Supreme Court

Judges and Hon'ble High Court Judges using this app.

All the Acts can be accessed in three ways using the built-in search engine.

- Search by Section
- Search by Word
- Chapter/Part Index

Advantages of this Application:

- Reference of Laws and Sections in seconds, on the move.
- Access better knowledge and understanding of Indian Law.
- Usage of minimum memory (2.5 MB only).
- Transforming your mobile into a digital Law library.
- No monthly fees and no internet data or hidden charges.

Initiatives by SNDT Women's University, Knowledge Resource Centre (KRC)

The increase of mobile devices among university students is making it impossible to ignore this. KRC, Juhu branch is using an open source software named way2sms app. It is **a virtual venue, which facilitates users to send free bulk SMSes. This service is used to send reminders to the students regarding overdues and fines. It is also used for sending urgent notices. Beside these, we are developing a Library App for providing the Library services.**

Conclusion

The mobile revolution offers both challenges and opportunities for academic libraries. It is today's needs to adopt mobile technology by libraries to maximize access of their resources and for user's satisfaction. In order for libraries to stay relevant, libraries must implement mobile library technologies for promotion of their services and its maximum usage. The challenge is for libraries to have a pool of skilled staff ready to take on emerging new roles and to have strategic plans prioritized, as technology time frames are very short.

"As librarians, we often waste time in deciding what and how to pursue a particular technology and by the time an application is developed the technology has lost its relevance." (Jacobs 2009)

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