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Impact of mobile technology in library services

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ABSTRACT

Now Days Mobile technologies and its application are playing an increasingly vital role in phone age people. Devices such as like smart phones, tablets, and e-book readers connect users to the world immediately, Advancements in networking technologies made it possible for mobile devices and application to be used in the field of education and Library services. It will be very easy access to information via mobile etc. It will also be effective and economic. Such technologies can have a great impact on learning by providing a rich, collaborative and conversational experience for Library. Therefore, this Mobile technology has become a necessary and important in Library Services. So this article seeks to explain the meaning of mobile technology and how this type technology is used for library services as well as explicate the advantages and disadvantage this technology.

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1. Introduction

The power of Information technology is greatly enhanced by communication technology by connectivity through wireless, smart phone technology or over cables and it is the crucial feature that allows access to the internet and the World Wide Web. These common platforms have stimulated an explosion of social software and cloud service that have made the internet a highly interactive medium and created new dynamics in computer use. As computing power and communication have enhanced, mobile devices play an increasingly important role, notably in the developing world. Mobile learning tools are the result of two digital converging technologies: mobile phone and computers.

The use of mobile devices for communication and information access to information communication technology applications has increased exponentially in the last decade. The smart phone networks report that

nearly half the world's population now either owns a mobile phone or has access to one. A growing number of higher education institutions are experimenting with how to take advantage of on this technology especially in developing countries students are receptive to new types of ICT in principle, although their level of familiarity and comfort with each application of technology varies. Students are using mobile technology abundantly for personal purpose, while their teachers have no idea about the use of this technology to improve teaching and learning. The rate of adoption of mobile technologies in India is amongst the highest in the world and there may be almost 868 million mobile users in India.¹⁻⁷

2. Mobile Technology

Mobile technology is just indicates – technology that is transportable; it is mentions to any device that you can move with you to do a wide variety of “tasks”. This technology is allows those tasks to be performed via mobile phone, eBook reader, Tablet Pc, laptops, etc. It is simplify distance

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learning in situations where access to learning is difficult or interrupted because of geographical location or due to post-conflict or post-disaster situations. Mobile devices and personal technologies that can support mobile learning include:

1. E-book
2. Out start, Inc.
3. Handheld audio and multimedia guides, in museums and galleries
4. Handheld game console, modern gaming consoles such as Sony PSP or Nintendo DS
5. Personal audio player, e.g. for listening to audio recordings of lectures (podcasting)
6. Personal Digital Assistant, in the classroom and outdoors
7. Tablet computer
8. UMPC, mobile phone, camera phone and Smart Phone

3. Mobile APPS

Mobile applications are also known as mobile apps. These apps are software programs developed for mobile devices such as like smartphones and tablets. They turn mobile devices into small hubs of function and fun. Some devices come preloaded with some mobile apps politeness of their builders or the mobile service providers with which they are associated but many more apps are available through device-specific app stores like google play store, Apple app store and Microsoft Store.⁸

4. Library Services Through Mobile APPS

The traditional library services are now moving to mobile library information services. There are the challenges in providing the necessary information to users at the right time. Mobile technologies have made communication and information access very convenient and timely to users. The adoption of mobile technology alters the traditional relationships between libraries and their users and introduces novel challenges to reader privacy. There is the shift from 'd-learning' (distance learning) to 'e-learning' and now from 'e-learning' to 'm-learning' will be the next big wave, which will reform education in India. (Mohan Lal Vishwakarma, Shyam Lal Maurya, Shivani Govil, 2013)

Some of the SMS notification services highlighted by Wang, Ke & Lu⁸⁻¹⁴ that libraries provide to its users are:

1. *Due-day reminder service*: This service sends reminders to user when their borrowed items are coming due.
2. *Renewal request service*: This service accompanies the due-day reminder service. If a user receives a due-day reminder and wants to renew the item, the users can click a renewal-request hyperlink provided in the text message to extend the due date of a borrowed item.

3. *Overdue notification service*: This service reminds user about overdue items.
4. *Request arrival notification service*: This service reminds users about the availability of reserved items.
5. *News and event reminder service*: This service sends reminders to patrons about important news, exhibitions, instructions, and so on
6. *New title notification service*: This service lets patrons get informed of newly acquired titles. This service accompanies the preview and reservation of new titles.

5. Libraries Can Provide A Wide Array of Mobile Services To Interested Users:¹⁵

1. Mobile online public access catalogs (OPACs)—Libraries are providing access to their OPACs via mobile-optimized websites. The New York Public Library Mobile Beta site supports a mobile OPAC and allows users to browse library locations and hours (see <http://m.nypl.org/>).
2. Mobile applications—some libraries have developed mobile applications for Smartphone's. The District of Columbia Public Library, for example, has developed an iPhone application that includes a mobile OPAC and the ability to place items on hold, and provides information on hours and locations of local libraries (see <http://dclibrarylabs.org/projects/iphone/>).
3. Mobile collections—Third-party content providers are partnering with libraries to deliver audio books, e-books, audio language courses, streaming music, films, images, and other multimedia that can be used on mobile devices. The Overdrive service is supported on numerous mobile devices and has developed an application for BlackBerry Smartphone's (see <http://www.overdrive.com>).
4. Duke University has created a free iPhone application called Duke Mobile, containing a wealth of information on digital library resources, including extensive access to the library's digital photo archive and other collections (see <http://itunes.apple.com/app/dukemobile/id306796270?mt=8>).
5. Mobile library instruction—some libraries are offering library instructional materials and resources via mobile platforms. For example, East Carolina University's "Research First Aid" is a series of podcasts for library researchers on the go (see <http://www.ecu.edu/cs-dhs/1aupuslibrary/researchfirstaid.cfm>).
6. Mobile databases—PubMed for Handhelds is a mobile web portal for the National Library of Medicine (see <http://pubmedhh.nlm.nih.gov/>).
7. Library Short Message Service (SMS) notifications—Many libraries use SMS for a variety of purposes, including notification for items available for pickup, Application of Mobile Technology in Library Services: An Overview 21 due date reminders,

information on availability of library materials, provision of call numbers and locations, and others (see <http://cpl.org/?q=node/12258>).

8. SMS Reference—some libraries are offering “text-a-librarian” services ideal for simple questions that can be answered with a brief response (see <http://www.library.yale.edu/science/textmsg.html>).
9. For more information, visit M-Libraries, Library Success: A Best Practices Wiki (<http://www.libsuccess.org/index.php?title=M-Libraries>). (Sudesh Kumar Sood & Ipshita Mukherjee, 2013)

6. Advantage of M-Technology For Library Services:¹⁶

6.1. The wikipedia (2014) proposed the following benefits

1. Relatively inexpensive opportunities, as the cost of mobile device are significantly less than PCs and laptops.
2. Multimedia content delivery and certain options,
3. Continuous and situated learning support
4. Decrease in training cost
5. Potentially a more rewarding learning experience.
6. It is visually simulative, flexible and easy to use
7. Diversification of learning activities, providing a blended approach to learning , where students can
8. learn different methods and in different formats,
9. Very interactive and well-designed user interfaces.
10. Promotes engagement between the learner and the lesson content.
11. Adequate security of the platform.
12. Accessed anywhere, anytime, including offices, homes or when in transit
13. SMS can be used to access information to faculty and learners more easily and quickly than phone calls or e-mails.

6.2. Disadvantage of M-Technology for library services:³

1. Discharged batteries can result in loss of significant data as there is the need to charge regularly.
2. Connectivity problems of mobile network signals
3. It is quite complicated to perform some professional works.
4. Lack of common platforms, i.e., horizontal screens with some handheld computers, and small-scale screens with mobile phones are difficult to operate.
5. The market is fast moving so devices are becoming outdated quite quickly.
6. When using wireless networks, bandwidth may degrade with increasing users.
7. It can strain the eyes of the learners if they keep looking at their screens for a longer period.

7. Conclusion

The Mobile Technology and its application are not new in library services. Most of the libraries across the world were already using SMS services to their Library users to provide them notifications regarding the library. Now a days the mobile computing has transformed libraries by enabling the users stress free admittance to “information on the go” service. By the ubiquity and relative success that mobile users have with Google and other search engines, libraries need to be competitive in order to remain relevant. The role of mobile technologies and mobile library initiatives for information access in academic libraries cannot be underestimated. In this paper, different mobile initiatives like mobile library website, MOPAC’s, mobile SMS reference services, mobile library notifications, QR codes, augmented reality etc. are highlighted with examples of Universities that have already made inroads in mobile library services.¹¹ Moreover, how these mobile library services would help to facilitate access to information in ubiquitous and time bound manner has also been discussed in detail. For libraries, especially academic libraries to stay relevant in the mobile era there is a need to implement mobile library technologies for the maximum access of their resources and for the satisfaction of their users and how they facilitate access to information are discussed to understand how libraries can leverage them for making their services fast and smart. In order for libraries to stay relevant, libraries must implement mobile library technologies for the maximum access of their resources and promotion of their services.

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9. Conflict of Interest

None.

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