ROLE OF MOBILE TECHNOLOGY FOR BETTER LIBRARY SERVICES

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Abstract

The modern era is the age of technology. Almost every field of the life of human being is haunted by technology. Mobile phones, laptops and tablets have made great revolution in our lives. It's gaining much popularity among youth, children and educated elders. The world of library has also witnessed many changes after the development of modern technology. The librarians and supportive staff need to be technocrats to deliver better services in the library. However libraries, now-a-days have broaden its horizon beyond the four walls. The present paper depicts the development of modern technology in the first part of the paper and later it illustrates applications of mobile technology to deliver various services in libraries.

Keywords: Use of Library Services, Technology, Mobile,

INTRODUCTION

It is rightly said that the information in twenty first century is on the tip of a finger. Smart phones made a great revolution in almost every field of human beings. Way back in the past mobile technology is developed for the purpose of communication. However it is a fact that the same communication technology has broadened its horizon and haunted the whole human life. The twentieth century witnessed the remarkable technological development in Developed countries like United States and United Kingdom. But in the recent years, developing countries like India, Bangladesh the modern technology, equipments and applications are quite easily available or produced. It's gaining much popularity among youth, children and educated elders. Before few years internet services were very expensive and unavailable at remote places. Only elite class people were using internet on mobiles and other devices. However the situation drastically changed and internet

services have become vital part of the lives of common people all over the globe. It is easily available everywhere now and the cost is also affordable by the common man.

Shortly mobile technology in the form of laptops, net books, tablets, smart phones, audio players cameras and other items became much popular as the devices are easy to carry, flexible and user friendly. The servicemen use it for official purpose, quick references, conducting an extensive research and so on. The young generation from New York to New Delhi and New Delhi to Aurangabad use mobile technology for accessing social media sites and applications like Facebook, Twitter, Whats app etc.

Growth and Development of Mobile Technology

The mobile technology is not an overnight magical invention. The different mobile devices were developed step by step in number of stages. Some major inventions are as follows.

Notebook Computers and Tablets

It is debatable what the first notebook or laptop computer was. The first laptops did not look like the clamshell designs that are known to us today. However the *Osborne 1* was accepted as the first true mobile computer (also known as notebook computer, notebook, notepad, and popularly laptop) by most historians. Adam Osborne, a publisher founded Osborne Computer and formed the Osborne 1 in 1981.

This was a mobile computer (laptop, notebook) that weighed close to 11kgs. The Osborne 1 had a five-inch screen, incorporating a modem port, two 5 1/4 floppy drives, a big collection of bundled software applications, and a battery pack. The computer company was a failure and did not last for very long.

After few initial attempts, the first commercially successful tablet computer was invented in 1989 by GRiD Systems. It weighed 4.5 pounds and had a tethered pen resistive screen like the Write-top. It was mostly used by college students for academic purposes. As it is user friendly like diaries, many office bearers use it like diaries to keep records.

Digital Players

British scientist Kane Kramer invented the first digital audio player, which he called the IXI. His 1979 prototypes were capable of approximately one hour of audio playback but did not enter commercial production. In 1996, American Telephone and Telegraph (AT&T) developed an internal Web based music streaming service that had the ability to download music from internet. In 1997, the world's first MP3 player, the MPMan F10, was developed by a South Korean company SaeHan Information Systems. The world's first car audio hard drive-based MP3 player was also released in 1997 by MP32Go and was called the MP32Go Player.

Mobile Phones

The first handheld cellular mobile phone was invented by John Mitchell and Martin Cooper of Motorola in 1973. Then in 1979, the first commercial automate cellular network (1G) analog was launched in Japan by Nippon Telegraph and Telephone. This was followed in 1981 by the simultaneous launch of the Nordic Mobile Telephone (NMT) system in Denmark, Finland, Norway, and Sweden.

Smart Phones

A Smartphone is a handy device that combines mobile cell phone and computing functions into one unit. It differs from common phones by its stronger hardware capabilities and extensive mobile operating systems. The tech company IBM has been given the credit to invent the world's first smartphone – the bulky but rather cutely named Simon. It was open for sale in 1994 and featured a touchscreen, email capability and a handful of built-in apps, including a calculator and a sketch pad.

Mobile technology is basically used as the communications technology with media transmission such as radio wave, infra-red and Bluetooth etc. Therefore one can transfer any type of data with mobile technology such as voice, video texts, images etc.

Libraries and Mobile Technology

Internet came in to existence in the 1950s and gained popularity only in the mid 1990s. Internet and mobile technology has completely revolutionized each and every sphere of life, be it banking, entertainment, or education. Likewise, its impact on libraries has been stupendous. Libraries which are also known as knowledge centers, have taken advantage of Internet and mobile technology in offering new collections and services to their users. Libraries in twenty first century have a social function in making knowledge publicly available. They play two crucial roles, firstly, to serve as a local centre of information and knowledge and secondly, to be a local gateway to national and global knowledge. They also serve as gateways to the world of knowledge for children and youth by offering a wide spectrum of books to ignite their minds. They attempt to cultivate reading habits among the children and youth.

Earlier libraries were 'place- based' service institutions which existed to cater to the information needs of their users. The users visited the libraries to consult various sources of information as per their needs. During the last three decades, the emergence of Internet technology, modern telecommunications and other allied areas like data processing, management information system, information retrieval systems, etc., has radically impacted the functioning and environment of libraries. Technology has brought a revolutionary change in every sphere of library. The expectations and demands of the users have increased manifold. They are no longer content with place- based library services as they want information services beyond the four walls of the physical library.

Mobile technology expanded the horizon of libraries to cater the needs of readers. The adoption of mobile technology alerts the traditional the relationships between libraries and their users and devices and introduces novel challenges to reader privacy.

Modern mobile devices can run different complex software, interact with cloud services, play audio visual content, and allow for advanced user interactivity. New hardware and technologies such as Bluetooth, accelerometers, and multi touch screens, as well as text messaging, smart phone software applications, mobile websites, global positioning systems (GPS), wi-fi, and media creation and capture tools, are all part of the mobile environment. At the same time the propagation of mobile devices and services raises to issues of access to information to the digital age, including content ownership and licensing, digital rights management, and accessibility.

Libraries are at the service of their users by embracing the growing capabilities of mobile technology. Modern libraries started offering mobile access to their websites and online public access catalogues: by supplying on the go mobile reference services: and by providing mobile access to electronic journals and books, multimedia content etc. The multimedia contents no longer are composed only of physical units to borrow, but increasingly are streamed on demand or downloaded, Circulating content in

urban, suburban, and rural libraries across the country. Most of the academic libraries have offered online books, journals and other contents to the students.

Mobile Technology and Library services through mobile technology can be provided through various types.

Mobile Online Public Access Catalogue (M-OPAC)

A Mobile Online Public Access Catalogue or mOPAC is a mobile version of a library's Online Public Access Catalogue that provides the same information as the OPAC. The mOPAC simply provides a mobile- friendly interface for accessing the library catalogue using Smartphone. Therefore, users' no longer need a computer to search books or journals. Now it can be done through Smartphone of the individual user. For example, LSearch is an application providing access to Visva-Bharati University library OPAC. The application directly connects the device to library server for real time information retrieval.

Mobile Applications and Mobile Databases

This is the age of mobile application. For every important thing of life, whether it is study, exercise or diet, there is mobile application. The libraries of different colleges and universities use different kinds of mobile applications for the services they provide to students. Through applications it becomes easy for students to get in touch and peep in their

library without physical barriers. They can access e books, journals and much more through such applications. Many libraries have developed their own mobile applications to facilitate their students and staff with best services. Such libraries maintain their own mobile database for the use of staff and students.

Mobile Library Instruction

The librarians also send basic important instructions like books or journals availability, submission dates, fines charged for any service etc. through Smartphone. The students can also be informed about examinations, new additions in library and much more via whats app or sms.

Information Alert service

Many libraries offer library instructional materials and resources via mobile platforms. In recent times, various instructional videos are posted on you tube channels or sent through smart gazettes.

Wi-Fi - Internet Access

When students and staff are in the campus, they can use library services without visiting library. It can be done through wi-fi internet access provided their mobile instruments. Some web based applications can be used in the campus with wi-fi access.

Library Catalogue search

Like MOPAC, the librarians can avail searching catalogues of catalogues through database applications or mobile web based services. The new books and journals are automatically added in the database through the system. It can also be controlled by the librarians by denying the access to the outsiders for the safety of the valuable content as well as the institution data.

Journal finder

The subscribed journals ant their articles can also be made available to students and staff by the library through mobile services. MOPAC, Mobile websites and different applications can be used as journal finder.

Audio-visual Tour

The audio-visual clip of library books, journals, new additions, services etc can be made available to the students and staff by posting it on mobile website or sending it through different application.

News and Events

News and events from college as well as outside can be made available to android mobiles of staff and students. It is quite easy and time saving for the librarians in the world of modern technology.

Virtual Reference service

Some libraries offer reference services through their web and applications. Different questions of students are also answered with the use of these services.

QR Codes:

Quick Response codes, scanned by mobile cameras are used to access or download different e contents like articles and videos. It is used by the libraries to give the access to the students to read the articles in subscribed or paid journals.

Merits and Demerits

Merits of Use of Mobile Technology for Library Services:

1. Mobile technology is easy to use hand held technology and it is affordable for anybody in modern age.

2. Every man has his own personal assumptions and interpretations. Mobile technology interact at personal level while providing the informative content or solving the issues. It proved to me more beneficial as compared to use services in crowed.

3. User can access the library e-resources through mobile technology from the library and outside of the library. It saves time as well as energy of the user.

4. Mobile technology allows the user to use libraries e-resources from anywhere in the world.

5. Through designing of mobile based website library makes it more interactive by adding chat, rooms, blog, social media etc.

6. User can give quick response and feedback related to library services and even gets quick response related to their quires.

7. Because of specially designed mobile based websites and applications, the users can operate services like they do on computer.

Disadvantages of Mobile Technology:

- The library staff should be technically sound to operate mobile technology based services. As there are many senior people already working in libraries for the years, it's getting difficult to train them to use modern technology.

- As the mobile is for multi-services, there can be many disturbances while accessing important content and one find it difficult to concentrate on serious issues while operating mobile.

- The excessive use of tablets, ipads, computer notebook or laptops,

Smartphone etc. harms the eyes, ears and brain.

- The users can lose their creativity of the mind by using ready-made content in mobile devices.

Conclusion

The academic libraries, now a days are facing the challenges to maintain interest and flow. The information easily available on search engines is not always correct and authentic. To read authentic valuable articles, contents or recent researches, sometimes the readers have to pay some amount. Therefore the role of libraries is again valuable in the modern technical scenario. Though it has become difficult for the libraries to shift from paper version to mobile friendly services, a remarkable number of libraries are getting success in achieving technological advancement. Apart from some merits and demerits of technology, it is rather a fact the libraries all over have become smarter with the use of smart mobile technology.

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