

**GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES**  
**USE OF NEW TECHNOLOGIES FOR ENABLING LIBRARY SERVICES****Prof. R. K. Rathod**

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**ABSTRACT**

This paper is discussing various new technologies that can be applied in Library and Information centers. Implementation of various Technologies has change the way of people to access and communicate information. Users need of easy access of information, leads Library professionals to think out of the box for meeting their information needs. Application of new technologies to provide library and information services are a significant step in this direction. In this 21st century Library professional's essentially to use various technology offering outreach technical options for librarians. Use of this technologies, provides well opportunity to extend new different types of library services to users.

**Keywords:** Mobile Technology, BlockChain, QR Code, RFID, Remote Control Technology, Library science, ICTServices, Library Services.

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**I. INTRODUCTION**

Libraries are not merely a storehouse of books but becoming a hub of information – based society. Because of increasing awareness among the users, availability of new resources and rapid advancement in Information and Communication Technology (ICT), library professionals and libraries are changing their traditional role. The web technology and Internet has changed the way of information is stored, retrieved and communicated in the libraries. As more libraries move towards traditional services to digital services to improve more advance services by adopting advance technology.

This paper discusses some advance technology that can be applied in the library and with the help of this technology the environment of the library will be upgraded and library services will fulfill the users' satisfaction.

**II. RESEARCH METHODOLOGY**

For this paper, literature search was carried out by using secondary sources. For this study, the documents were studied online on Google Scholar, databases, N-list, seminar proceedings.

**III. FOLLOWING TECHNOLOGIES CAN BE APPLIED IN LIBRARIES****Mobile Technology**

Mobile is playing a vital role in enabling Digital India. Now a day, Mobile device is the integral part of every human life. From very beginning of childhood to old man and rural to urban and every corner of the world everybody use Mobile technology for accessing information. In 21<sup>st</sup> century there is revolutionary change in Information and Communication Technology. Use of nanotechnology is increased. Also this change is used in mobile technology. Now android version of mobile permit their users to access, stored, organize, retrieved information. There is a continually growing numbers in engaging mobile phone as a search tools. Smart phones, cell phones, iphones and tablets are commonly used devices for seeking information.

The invention and the use of information technologies need to meet life's basic challenges and responsibilities (Ademodi & Adepoju, 2009). Academic libraries can use several tools and techniques to fulfill the information need of their users. In the teaching and learning mobile technology is one of the better options to provide service to their remote users effectively. Libraries can play an important role to make their users self- directed and

independent learning by providing access to their resources. Following is the possible mobile services that can provide –

- Mobile Apps for library
- Mobile on-line Public Access Catalogue (MOPAC) service
- Reference Enquiry Service
- List of New Arrivals
- Current Awareness Service and Selective Dissemination of Information Service (CAS & SDI)
- Distribution of E-Resources through Mobile site
- E-mail and SMS –Service
- Library instructions, library working hours and library tours etc can arrange
- Mobile databases

### **Block Chain Technology**

Digital world has introduced new effective, innovative products globally by the use of mobile, internet, social media and cloud technology for better decisions. A Blockchain is a type of Distributed Ledger Technology (DLT) which stores transactional records, called blocks, in several databases, known as the “chain”, in a network connected through peer-to-peer nodes (Ahram et al., 2017). A blockchain is a decentralized database and peer to peer network that stores a registry of transactions secured with cryptography. In 2008 a blockchain was created by group using the name (pseudonym) Satoshi Nakamoto to serve the public distributed ledger for bitcoin crypto currency transactions. Some of the services can enhance by using block chain technology in the library.

- Initially block chain technology developed for financial service purpose, further it may apply in other field
- In libraries it is used for storing digital information
- In Block chain technology there is a peer to peer network system can be used for inter- library loan services.
- In digital archives or rare collection where its originality and authenticity is required
- In R & D libraries and corporate libraries for intellectual property and for keeping records

### **QR Code Technology**

QR code was first introduced by Denso Wave in the year 1994. QR Code stands for quick response, developed concept for code and whose aim was to gain the high-speed reading. It is a two- dimensional bar code and can be easily read by smartphones and mobile phones with cameras installing QR code reader app.

QR Code can be used for following –

- IT is open source technology; one can create the QR Code by using free software.
- QR Code is very fast to access the information.
- Simple implementation process and only required android phones with QR Code scanner for reading the code
- Not required so much hardware
- It helps to increase the information and technology literacy of the users.
- Library professionals can connect their users to library services like OPAC service, IR service, Library instructions, Library news easily

### **RFID Technology**

Libraries are now automated libraries where daily housework is performed with the help of computers. Libraries provide ICT based services to increase the quality of their services and decrease the time consuming transaction. One of the best tools in the security of library is RFID (Radio Frequency Identification). Most of the library are adopting this technology for the security of library resources and provide quick and effective services. By using this technology achieves the fourth law of library services. Some of the advantages of RFID are listed below –

- Can be issuing multiple books at a time
- Reduction in queue at circulation desk (Saves the time of user)
- Saving time of the library staff while issue/return of library resources
- Reduction of staff at circulation desk
- Allow library staff to provide other users' centric service
- Provide more security of library collection

### **Remote Control Technology**

This is a great development in the ICT. With this technology one can work with a remotely located computer system. By using this remote technology, we can do online meeting, sharing of software, sharing of desktop, file transfer or web conference etc. By using TeamViewer or Ammyy or AnyDesk remote control software we can share our desktop to our client.

## **IV. USE OF AUTOMATION**

Library automation is the application of ICT and the excellent way of reducing human participation for library services. Automation provides excellent services within less time and minimum cost. In the market many automation software are available for library services like – Lisys, SLIM21, Koha, E-Granthalay, etc. The functions of the library such as acquisition, cataloguing, circulation, serials management, stock verification etc are controlled through the software, which minimize the human errors and maximize excellent service to the library users.

## **V. CONCLUSION**

Libraries are well-known for knowledge having rich and updated information which are available for their users. The main purpose of the libraries is to dissemination of information easily to their end users. To fulfill this purpose, library professionals use several tools and new technologies to enhance their services. Library professionals can introduce more library resources and services to their users by using different new technology. Use of technology in library services reflects greater impact on their users.

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