

## **ACADEMIC LIBRARY: ROLE OF INFORMATION COMMUNICATION TECHNOLOGY**

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*The paper highlights the changing dimension of library services due to the impact of Information Communication Technology. ICT has fundamentally affected the operations of academic library and information services and this has also grate impact on library personal training, user and library professional on various levels. Benefits of use of ICT in services can be broadly explained in terms of 4Es, namely economy, case, extension and efficiency. Library and Information services are being transformed by technology and they have to adopt to these changes to meet their user's changing needs and growing expectations. Rapidly developing information and communication technology are creating now opportunities and challenges.*

### **Introduction**

New technologies have always been of interest for libraries, both for the potential of increasing the quality of service and for improving efficiency of operations libraries are the depositors forms of knowledge and continue to be keepers of knowledge. The new information technological developments, which had occurred during these last few decades, have drastically influenced the functions and services of library and the library science adopted technological changes into three stages, In the first stage, information technology is used to do the same things, but more quickly than before. In the second stage, technology is used for different new applications. In the third stage, technology is used in ways that creates fundamental changes within academic libraries. The exponential growth of information and communication technology has greatly influenced the modes, media and formats of information Technologies especially computer and telecommunication, have highly revolutionized in the field of library and information services.

### **Aims of Information Communication Technology**

Libraries, which were considered only as the store housed of knowledge have got a new outlook in the modern information communication technology era. The main aim of Information Communication Technology in library means implementing of ICT equipments and tools in information provide process as a media and methodology. The purpose of ICT library is generally to familiarize users with the use and working of computers and other electronic medium for the libraries, ICT's has tremendously changed

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the management of resourced or house keeping operations as well as the way services are delivered while generally IT application tools and integrated library management system are largely used in cataloging, circulation control, serial control etc. New innovations in computer networking and software resulted in information to be cheated and distributed with low cost and without the need of complex programming skill that were needed. As result more and more information is becoming available from with might have otherwise being inaccessible sources. The use of ICT is potential beneficial to development as it encourages the sharing of information and the effective involvement by common and social and group at different levels.

### **Definition of Information Communication Technology**

The term “ICT” describe the use of computer based technology and the Internet to make information and communication services available to a wide range of users. The term is used broadly to address a range of technologies, including telephones and emerging.

Information and Communication Technology is the study of the technology used to handle information and aid communication. ICT is the catch-all phrase used to describe a range of technologies for gathering, processing, storing and transmitting information. As per the definition used by United Nations, ICT can be described as a varied set of goods, applications and services used to produce, store, process, distribute and exchange information. They include both the most familiar technologies of television, radio and telephone and also personal computers, mobile phones, satellite and wireless technologies, and the internet.

### **Use of Information Communication Technology**

In the digital era, one of the challenges of managing library services is the ever changing nature of the legal and regulatory system. The implementation of ICT in the libraries demands new form of the library services to get more user satisfaction. In the ICT to justify the realization of five laws of library science laid by Dr. S. R. Ranganathan library services include information about all the services.

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|----------------------------------|---|
| i) Information Services          | ii) Current awareness services,                 |
| iii) Document delivery           | iv) Data base collection,                       |
| v) Audiovisual service           | vi) List of new published received,             |
| vii) Inter library loan searches | viii) Customer relation and user education, ix) |
| Electronic reference disk        | x) User services such as membership query,      |
| xi) Access to library catalogue  | xii) Customer relation and user education.      |
- internet, database.

### **Development of Information Communication Technology**

Information Communication Technology can be used in the library to support technical functions associated with technical processing and circulation work ICT has different fields that affected the life of human beings as well as the information era. ICT holds many advantages such as time, place convenience, ability to dissemination timeless, share information but the important technologies, which are being utilized for library activities are

**E-Book :** E-book has been described as a text an alogous to a book that is in digital form to be displayed on a computer screen. E-book can be read just like a paper book.

**Internet :** Internet is a network of inter connected world wide webs of different types of organization such as educational institutions, business, defines and other science organization.

**E-Journal :** Electronic journal helps the librarian in addressing these problems to a great extent without significantly affecting the service levels.

Electronic journals can be accessed via internet from any web enable PC. Emerald OCLC and J-gate are some of the example of e-journal aggregator services.

**Multimedia:** Multimedia are the technologies that facilitate the integration of two or more types of media such as text, sound, graphics full motion video or animation into a computer based application. It can be used either as a single stand-alone system or multi-user systems for information dissemination.

**Bluetooth:** Bluetooth is a technology specification that utilize the 2.4 GHz industrial, scientific and medical (ISM) frequency band in order to achieve wireless connectivity among devices. Bluetooth technology is an industry wireless specification standard for use in various devices for short range communication.

**Voice Over Internet Protocol:** Voice over IP that is voice is delivered using the internet protocol, is a term used in IP technology for a set of facilities for managing the delivery of voice information using the inter protocol (IP).

**Wireless LAN:** A Wireless Local Area Network (WLAN) is a flexible data communication system implemented as an extension to or as an alternative for a wide LAN. It uses a high-speed radio frequency (RF) network access technology to transmit data.

**WAP (Wireless Application Protocol):** WAP is an application communication protocol used to access services and information inherited from internet standards for handheld devices such as mobile phones.

**WIMAX :** Wimax is a wireless Metropolitan Area Network (MAN) technology that will connect 802.11 (wi-fi) hotspots to the internet and provide a wireless extension to cable and DSL for last mile broadband access.

### **Advantages of Information Communication Technology**

The user of a digital library needs not to go the library physically. ICT has provides new media, new modes of storing and communicating information ICT brought many services to library to speed up their activities. It helps to remove barriers of communication, distance and time. The advances in technology will continue to improve the effectiveness of libraries. It helps to strengthen communication and collaboration among research, government and educational institutions.

The available information present in the libraries can be fed to home page and made available to users anywhere.

### **Conclusion**

In modern IT era every field is growing and adapting new technology hence library is adopt such challenge and now library also use Information Communication Technology in library. Today only on the basis of information and technology the social, economic and geographical references are changing. Hence the thing 'right access to right information at right time' gets importance in changing situation. The ICT truly benefit the library to achieve the goal and objectives of the library ICT has greatly affected the information

environment. Librarians must have the knowledge, skills and tools in handling digital information and that will be the key success factor in enabling the library to perform its role as an information support system for society.

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