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**APPLICATION OF ICT IN LIBRARY SERVICES: WITH SPECIAL REFERENCE TO MEDICAL LIBRARIES IN KOLHAPUR**

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**Abstract:**

*This paper describes the use of Information Communication Technology (ICT) in health science libraries with special reference to Kolhapur region. The survey has particularly conducted to know the use of e-resources and ICT in health science library system. The analysis of data covers Automation of library, Digitization of documents, Internet facility, RFID technology, Consortia, E-resources. This study has also shown the preferences and importance given to ICT in medical College libraries in Kolhapur.*

**Key Words:** *ICT, Medical Library, Automation, Digitization, E-resources.*

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**Introduction.**

The digital technology is affecting library services in revolutionary ways and the momentum toward these changes is irreversible. Many countries around the world are investing in digital technology to improve and up-date the knowledge they provide their younger generation they are also consistently promoting research on technology use inside the library for different services. The main force that has brought revolutionary changes in recent years, the impact of technology has been tremendous on library systems. In health science environment, library is deemed as a place of intellectual stimulation and epicenter of knowledge. In 1970 to 1990 the information seekers are depending on printed resources and libraries were unique places for providing such seen a great deal of change due to information communication technologies (ICT) resulting in a demand for new patterns of scholarly information. These technology advancements have made significant impact on the froth of knowledge and in unlocking the human potential.

**What is ICT?**

The term ICT describes 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 technology devices. Central to these is the internet which provides the mechanism for transporting data in a number of formats including text, images, sounds and videos. Information and communication Technology is used in the

various departments in Medical Library services in Kolhapur these are.

1. Automation
2. Digitization
3. Internet
4. Consortia
5. RFID technology
6. E – resources

**Automation.**

Automation may be defined as the application of computers to perform traditional library housekeeping activities such as acquisition, circulation, cataloguing, reference and serial control. Automation is used to reduce the amount of staff time devoted to repetitive activities that must be done in any properly functioning library.

**Need for automation**

1. Increasing technical processing efficiency over manual system
2. Improvement of library services as well as administration and management
3. Saving of time staff and users
4. Provide wide access to resources within the libraries and elsewhere.

Application of Information and Communication Technology in academic library as follows.

Acquisition, Cataloguing, Serial control, Circulation, Management support, Information Services and Stock Verification

**Digitization.**

It is necessary to preserve the intellectual assets of any institute for long time use. The old libraries have rare collection and unique documents, which is necessary to digitization.

Digitization are requires tools as follows

Hardware - Computer system, Scanner, Digital Camera

Software – Supporting software

File compression software

Optical Character Recognition (OCR) software.

Manpower - Trained manpower is required to run the equipment and manage the digitization project

Digital Conversion process

Document → Data capture → Data Processing → Storage → Indexing and processing → Retrieval and Display.

**Internet:** Internet is a communications protocol, a language which computers use to talk to each other, called TCP/IP. This language is designed to enable computers to exchange data reliably and efficiently, though not necessarily quickly. More generally, the term is used to signify the network of computers connected using TCP/IP: the connecting wires and the equipment used to route the information (the network infrastructure), and the computers themselves. Even more generally, the Internet is often used to indicate the community of users and computers collectively. Requirements of internet. The essential requirements for the connectivity to the internet are computer, Telephone line / Internet service provider and modem.

Advantages of internet services.

1. The librarian can serve even the remote user setting at his reference desk.
2. The users can launch a reference query through e-mail.
3. The users can browse the particular side for his need.
4. The user's time can be saved to a great extent.
5. Current and up to date information can be provided.

#### **Consortia**

Library consortium is a community (co-operative) of two or more information agencies which have formally agreed to coordinate, co-operative or consolidate certain function to achieve mutual objectives. It is an association of group of library to achieve mutually the joint benefits'. It provide a way for its member to conduct business in a cooperative manner. Several library consortia have been set up over last few years to obtain licenses and to enable desktop internet access to scholarly electronic resources like e-journals and databases. Some of the major consortia formed in India over the years are.

1. Bosla – Consortia
2. Forsa – Consortia
3. Csir – Consortia
4. Indest
5. Ugc Info Net

#### **Benefits of consortia**

1. To support to needs of users through co-operation resources sharing and enhance access to electronic information.
2. To develop suitable collection development and acquisition policy.
3. To make use of the available latest information technology.
4. To eliminate the different problems faced by the librarian in order to provide various services to users.

#### **RFID Technology.**

RFID is the latest technology to be used in library for book identification for self check out and for sorting and conveying of library books and also for theft detection. Using RFID technology is to increase the efficiency. Reduce data entry errors and free up staff to perform more value added functions.

#### **Components of RFID**

1. RFID tags that are electronically programmed with unique information.
2. Readers or sensors to interrogate the tags.
3. Antenna.
4. A server or docking station on which the software that interface with the automated library system is loaded. It is also possible to distribute the software among the readers and sensors.

**System of RFID work** An RFID system consists of a tag, which is made up of a microchip with an antenna and an interrogator or reader. The reader sends out electromagnetic waves. The tag antenna is tuned to receive these waves. A passive RFID tag draws power from field created by the reader and uses it to power the microchips circuits. The chip then modulates the waves that the tag sends back to the reader and the reader converts the new waves in to digital data.

#### **Web Designing for Libraries**

A website is a collection of web pages, images, videos and other digital assets hosted on a particular domain and sub-domain on the World Wide Web (WWW). All publicly accessible website are seen collectively as constituting the World Wide Web accessible. Website in our digital era has become a publicizing media to serve information to the users from different parts of the world. The growth rate of information technology is very fast compared to other developing technology and knowledge.

#### **Advantages of WWW**

Libraries and information centers are being transferred to the internet for fast access and retrieval of information. The internet has become the world's window to information and web pages serve as the information carrying

documents. Libraries keep their own web pages as it is a media of publicizing the library functions. Activities, programs resources and services. Thus each library and information center needs to establish its own website.

Need for designing website

1. To access to the shared library online catalogue
2. To provide online index and databases
3. To provide access to online reference materials
4. To provide access to web resources and web search engines
5. To offer information about the library and its services and policies
6. To provide support through tutorials, context sensitive help and e-mail

#### **E-resources**

An electronic resource is defined as a resource which requires computer access or any electronic product that delivers a collection of data, be it text referring to full text bases, electronic journals, image collections, other multimedia products and numerical, graphical or time based. These may be delivered on CD ROM, on tape, via internet and so on. Over the past few years, a numbers of techniques and related standards have been developed which allow documents to be created and distributed in electric form. Hence to cope with the present situation, libraries are shifting towards new media, namely electronic resources for their collection developments that the demands of users are better fulfilled. The e-resources on magnetic and optical media have a vast impact on the collections of academic libraries. These are more useful due to inherent capabilities for manipulation and searching, providing information access is cheaper to acquiring information resources, savings in storage and maintenance etc. and sometimes the electronic form is the only alternative.

#### **E – Learning**

E learning can be defined as learning anywhere and anytime through the internet. It is delivery of information training is education programs via electronic media. E – learning includes a wide range of electronic communication like the internet, Intranet, Satellite broadcast, interactive television, CD ROM, DVD, audio and Video tapes etc. effective e-learning depends on the web usability communication, relationship and knowledge management tools.

#### **Conclusion**

Medical College libraries are facing the challenging tasks of satisfying the increasing complex and diverse information needs of the

students and practitioners. These libraries can use today a wide variety of technology options that exist now. Fruitful results can, however, be obtained only when we make the best use of the technologies. In Medical library services effective use of Information Communication Technology (ICT) has assumed greater relevance in the context of forth law of library science.

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