Use of ICT (Information and Communication Technology) in College Libraries

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Abstract:
Libraries in the past used to be temples of knowledge - knowledge generally reserved only for the few. Today, ICT provides a means of reverting this paradigm, not only by providing access to information, but also by disseminating information and fostering interaction. It enlarges the scope of acquisition, processing, organization and dissemination of information and knowledge; it raises speed, reduces cost and overcomes space, time, language and media barriers. The librarians in academic and research institutions have to apply the tools and techniques of ICT to meet the changing requirements of the users by innovating its procedures and systems.

Keywords: E-BOOK, ICT, College library

1. Definition
Several definitions have been given to explain and interpret the acronym ICT and the one given below seems to be the closest: ‘ICTs is a generic term referring to technologies that are used for collecting, storing, editing and passing on (communicating) information in various forms.’

2. Tools of ICT
1. Computer: Computers are the most important tools for library automation. With the help of computers one can gather, store, generate, manipulate, process, communicate, evaluate information and data with high speed and accuracy.

2. Internet: The Internet plays a vital role in libraries. It can be a virtual library where the world's information resources are gathered for the use of the clientele. Internet has enabled a lot of innovations in contents, methods of production and distribution of current awareness Services.

3. Digital camera: Digital camera is a camera that takes video or still photographs via an electronic image sensor. We can use digital camera for staff photographs, book illustrations, building layouts and images. These types of services are useful for the technology-hungry users.

4. Webcam: A video camera that attaches to a computer typically via USB or that is built into a laptop or desktop screen. It is used mostly for video phoning over networks. Webcam is also important for snapping of photographs for the use of Staff ID Card.

5. Smart Card: Library has introduced the smartcard. With a card like this, the library is able to regulate all the transactions within the library.

6. Scanner: An optical device that reads a printed page or transparency and converts it into a graphics image for the computer. Scanner is most important tool for scanning of books and other material for library.
7. **E-Book**: Electronic book is an e-text that forms the digital media equivalent of a conventional printed book. E-books are usually read on personal computer or smart phones, or on dedicated hardware devices known as *e-book readers* or *e-book devices*. From library point of view e-books are cost saving in terms of shelving, binding, circulation, overdue notices and management of fines.

8. **Electronic Journals**: Electronic journals, also known as *e-journals*, that can be accessed via internet from any web enabled PC. Depending on the type of subscription, one or more users can access the service simultaneously. The main disadvantage of electronic journal is that libraries cannot physically possess the journals.

9. **WEB-OPAC** *(Web-based online Public Access catalogue)*: Web-Opac is the most important tool for searching of data in the library.

10. **Animation**: Moving diagrams or cartoons that are made up of a sequence of images displayed one after the other. Animations are created for ad banners as well as instructional sequences.

11. **E-Mail**: *(Electronic-Mail)* E-mail is the electronic transmission and receiving of messages, information, data files, letters or documents by means of point-to-point systems or computer-based messages system. E-mail messages can also be formatted with graphics like a brochure or Web page and it also send to multiple users.

12. **DVD**: *(Digital Video Disc or Digital Versatile Disc)*: An optical digital disc for storing data. The disc uses the same diameter platter as a CD, but holds 4.7GB rather than 700MB. DVDs can be recorded on both sides as well as in dual layers.

13. **RFID Technologies**: *(Radio Frequency Identication)*: A data collection technology that uses electronic tags for storing data. The tag, also known as an "electronic label," "transponder" or "code plate," is made up of an RFID chip attached to an antenna. Depending on the type of tag and application, they can be read at a varying range of distances.

### 3. ICT Based Library Activities

1. **Data Processing**: Data processing is any process that uses a computer program to summaries, analyse or otherwise convert data into usable information. The process may be automated and run on a computer. In the data processing we can do Data Entry, Data Coding, Data Transformation, Data Translation, Data Summarization, Data Aggregation, Data Validation, Data Tabulation, Statistical Analysis, Computer graphics, Data Warehousing, Data Mining

2. **Circulation**: A circulation department is one of the key departments of a library. It provides lending services and facilities for return of loaned items. Renewal of materials and payment of fines are also handled at the circulation desk. Circulation staff may provide basic search and reference services, to library users.

3. **Cataloguing**: Online cataloging has greatly enhanced the usability of catalogs, OPACs have enhanced usability over traditional card formats. The online catalog does not need to be sorted statically; the user can choose author, title, keyword, or systematic order dynamically. Most online catalogs offer a search facility for any word of the title is reached even better.

4. **Bibliography**: Bibliographic Service Compilation of bibliographies, reading lists and state-of-art reports are very parts of LIS work, particularly in research and academic libraries. Browsing through bibliography database in electronic form on CDROM or online, offers convenient, efficient and cost effective information retrieval. Bibliography databases also provide unique search features such as searching on multiple criteria (key-word, subject,
author, source, classification code, year of publication, language etc.), and variety of display formats & styles.

5. **Prepared in house database:** A library is a collection of sources, resources, and services, and the structure in which it is housed it is organized by the library for the use of library members. Modern libraries are increasingly being redefined as places to get unrestricted access to information in many formats and from many sources. In addition to providing materials, they also provide the services of specialists, librarians, who are experts at finding and organizing information and at interpreting information needs.

4. **Library Services through ICT**

1. **CD Rom Searching:** The CD-ROMs coming along with books are assigned accession numbers and are kept at the computer section to be issued to the users to get information whenever needed. Library has also subscribed to CD ROM database provides for online Access.

2. **On-line Networking:** Networking is one of the most effective ways of serving users’ needs comprehensively. Networked access to databases would help get newly-published information to library users.

3. **Photocopying:** The technology of reprography made a big impact on the document delivery system. Most of the research libraries have reprographic machines and provide photocopy of any document on demand.

4. **On-line Information Service:** Online Information services are anticipatory or responsive. Both these services promote the use of library materials, make available library materials to users and thus meet user requirements. The various services include Newspaper clippings, Abstracting/Indexing Services, Current awareness services, translation services, referral services, photocopying services and Computerised services.

5. **News Clipping Scanning service:** Newspaper Constitute an important source of Information as they contain the latest information in the form of news with, often daily, updating. Print media is useful for research needs but many organization and individuals are turning to online newspaper clipping services and some are organization do this by their library.

6. **On-line Reservation Service:** The Online Reservation Service allows you to reserve books and journals which are on order, being processed by the Library or on loan to another reader. User can place a reservation at the Issue or Information Support Desk using the request option on the on-line catalogue.

7. **Database Searching Service:** Through this service, we regularly provide the users with the exact information they need, depending on their interest profile, from our collection of major national and international databases (retrospective and current) on our subject. The databases are in CD ROM or computerised form which saves their valuable time and energy, as the information available here is pinpointed and readily accessible.

8. **Audio-Visual Service:** Audiovisual materials are important sources of information, education and entertainment. Many libraries particularly media libraries and large academic and public libraries hold audio visual material such as DVD, films, pictures and photographs etc. Libraries allow their members to borrow these. Recent developments in storage media, compression and encryption technology have made it possible to store large amount of multimedia documents on hard disk and disseminate through internet.

9. **Internet Access:** The use of the Internet around the world has been growing rapidly over the last decade. Libraries provide free or controlled access to internet and email. Depending
upon the availability users can be given time slots for use of internet facility. Usually internet enabled terminals are provided in the library that can be used for internet access and email etc.

10. **E-Query Services**: E-Query Service is a Web-enabled contemporary reference service offered to the registered members of the Library to handle queries received in person or by e-Mail. E-Queries may sometimes need to be followed-up with telephone, fax, regular mail, or personal interactions. Library, appropriate and brief information gathered in response will be sent to the enquirer through e-Mail within three consecutive working days from the date of receipt of the query.

5. **Conclusion**
Information and Communication Technologies (ICTs) play an important role in enhancing efficiency in development of Library service. ICT is changing the work of libraries and information centers. More than ever, the libraries of India need this technology. An increased number of users, a greater demand for library materials, an increase in the amount of material being published, new electronic formats and sources, and the development of new and cheaper computers are some of the reasons for the growing need for ICT in India. Librarians, library patrons and supporters, and, above all, must help develop ICT-based libraries to meet the changing demands of the users.

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