

## **ICT implementation: What makes the difference in Academic Library for Best Practices**

**RAVIKUMAR M**

Librarian

Seshadripuram Academy of Business Studies  
Kengeri Satellite Town, Bangalore-560060

### **Abstract**

Academic institutions and their libraries play an important role in the manpower development of any nation since they provide the high as well as middle level manpower needed for the social, political and economic advancement of a nation. This is done through their programmed of teaching, learning, research and community services. The central place of academic libraries is called into play because it is the duty of these libraries to provide the necessary information to the lecturers and students to achieve their teaching learning and research needs in the easiest, fastest and most comprehensive way. This paper addresses the question of why some academic libraries have managed to introduce widespread use of Information and Communications Technology (ICT) to needy users and knowledge society. It discusses the different ICT based tools and its usefulness in today's modern libraries. The importance of these ICT based tools is collecting, storing, implementing and dissemination of information to the user.

**Key Words:** Information and Communications Technology, Academic Libraries, Best Practices

### **I. Introduction**

Library is the fulcrum of support for the entire range of academic activities on an educational campus. In today's high-tech learning environment, the library as a learning resource is taking up increasingly more academic space and time in the life of a learner. It is true that libraries largely support learning, teaching and research processes in institutions. The primary function of the library is to create awareness and initiate the students to feel library is an integral part of their career. The core objective of the library is to support the academic programmes offered and the library may evolve its collection and services mainly reflect the curriculum requirements of its users. The library may design a system to deliver its products and services to attract more users. Modern society is based on information. So, information is considered as the fourth resource after money, material and manpower. In the present ear the information is not only to be considered as a resource and also it is a production and basic need of the new generation. The development of electronic information system has influenced libraries in a big way and helped the professional to disseminate the information quickly and exhaustively to the readers.

The traditional concept of libraries which was completely based on print media is changing towards digital/electronic form with the help of Information Technology. The new media and Technology may be used to preserve documents for a long time.

The library is an important instrument of education. In the hanging educational environment in India, the role of the libraries in education, especially in higher education is very significant. The role of library as a tool and an integral part of higher education to achieve quality education is well recognized.

Education is an all-pervasive means of personal development, which leads to social change. The primary purpose of education is to provide individual the widest opportunity to develop his potentialities. The library plays an important role to provide him with wide opportunities to learn, think and develop his capabilities on his won lines. Library is a social institution, which plays a crucial role in the socio-economic and cultural spheres too. Education is the most effective instrument to meet these challenges. The interior design of the library is considered as a community centre providing information catering to the cultural, political, economic and research needs. Academic and research pursuits in these days of information technology leans heavily on libraries since the conventional book remains a vital link with history and other worlds. Though home reading provides a comfort, reading in library with ample documents spreading beyond one's limitations is certainly convenient, comfortable and advantageous.

## **II. Developments In Information And Communications Technology**

The development in computer communication technology is related to the development of IT. These two technologies are the backbone of IT. In communication techniques, new channels of communications provide continuous flow of information through computer terminals, and thus the computer communication network provides for vast storage and transfer of information. So, ICT is a term used to cover technologies used in the collection, processing and transmission of information. It includes micro electronic and info electronic based technologies.

Thus, ICT means the use of hardware and software for efficient management of information, i.e, storage, retrieval, processing and communication of information. It includes some major technology for information management.

## **III. Information Technology (IT) and Information Communication Technology (ICT)**

This is an age of computers. Computer has revolutionized in all fields of knowledge. Computer is a key element in handling the information and also in handling of communication devices. The computer communication convergence has made knowledge accessible quickly and cost effectively. Networking brings out in overcoming geographical barriers. An electronic computer network connecting millions of computers which provides the path for continuous flow of information.

#### **IV. Need of ICT Applications in Libraries**

The necessity of ICT in the libraries is because of the following reasons.

- a) To achieve speed, accuracy and reliability in the process of access and retrieval of information.
- b) It is assumed that there will be a danger of non-availability of hard copies of documents and in the documents will be available only in e-forms. For this reason, the implementation of ICT in libraries is essential.
- c) Due to the increasing prices of print materials, no library can afford to acquire all the publications and hence there should be resource sharing through networks and for participating in the network, ICT applications in the library are essential.
- d) The international data basis like DIALOG, MEDLARS, INLS, and AGRIS et, are available in e-forms. Therefore, if the library has no application of ICT, there is no possibility for getting access to these to these global level data bases.
- e) The information generated in all fields is multidimensional and with increasing speed. So, there cannot be manual bibliographic control on this, and it is only feasible through ICT applications.
- f) The information seeking behavior of the users is also changing according to their changing information needs and so to meet these needs, it is essential for the libraries to implement ICT to improve the retrieval techniques.
- g) Through ICT, it is possible to improve quality, user friendliness, effectiveness, reliability and regularity of library services.
- h) The application of ICT facilitates to utilize the ever-widening sphere of electronic information.
- i) Through application of ICT, the libraries can prepare themselves, for their survival may be on local, regional, national and international levels.
- j) The use of ICT can provide round the clock access, (24 hours) and services to the users and even outside the premises of the library.

#### **V. ICT Enabled Best Practices in Academic Libraries**

##### *a. Library Catalogue*

##### Online Public Access Catalogue

- i. Multiple search
- ii. Multi-user
- iii. Remote access
- iv. Fast updating, and retrieval
- v. Variety of output formats
- vi. Data exchange and sharing
- vii. No separate efforts required for creating catalogue
- viii. Web OPAC

- ix. Uses common web browser (instead of client software)
  - x. Can be accessed via internet (comp. LAN)
  - xi. Can run independent of library management system
- b. *Remote User Services*
1. Renewal
  2. Recall
  3. Reserve
  4. Register Membership
  5. E-reserve
  6. E-books loan
  7. Request for book lists
  8. User guides
- c. *Information Services- Reference Service, Bibliography, Current Awareness*
- ❑ Information products
    - Formats,
    - contents and
    - methods of production & delivery of information products,
    - New business model for use of information products.
    - Requires procedural and infrastructural changes and cost implications in Libraries.
  - ❑ Emergence of **Internet** as the largest repository of information and knowledge.
  - ❑ Extinction or significant transformation of some of the **conventional information services** such as press clippings, contents pages, company information etc.
  - ❑ Use of new tools and technologies for storage, retrieval and dissemination of information.
  - ❑ Transformation of role of LIS professional as the subject specialist and end-user gets directly involved in the information work and consequent need for new skills.
  - ❑ Shift from physical to virtual services that offer convenience of time and location for access to services.
- d. *Document Delivery*
- i. Holding lists
  - ii. Full text Electronic Journals
  - iii. Aggregators services
  - iv. Internet
  - v. Automated document delivery services (ArtTel)
  - vi. Local hosting of contents
- e. *Inter library loan and union catalogue*
- i. Centralized Union Catalogues

- ii. Online updating by partner libraries
- iii. Automatic updating (harvesting)
- iv. Offline updating
- v. Distributed catalogues
- vi. Distributed Searches through Single interface
- vii. Automated ILL systems
- viii. Third party, ILMS, online/email based ILL request
- f. *Audio Visual Services*
  - i. Format: Analogue> Digital
  - ii. Storage medium, life
  - iii. Transmission, exchange and sharing
  - iv. Access: Players, Desktop, Internet
  - v. Multimedia
- g. *Customer Relations and User Education*
  - i. Communication medium
  - ii. Listserv, Chat rooms, virtual communities, virtual tours
  - iii. Online feedback systems: surveys
  - iv. Bipolar to dynamic communication: Peer to peer communication
  - v. Educational Technology

## **VI. ICT Based New LIS**

- a. Internet access
- b. Access to E-resources
  - i. E-journals
  - ii. E-books
  - iii. Patents
  - iv. Standards
  - v. Course material
- c. Subject Gateways
  - i. List of carefully selected and evaluated electronic resources arranged by broad and sub subject groups.
  - ii. Provides links to the sources
  - iii. May include comments and information on quality of information and access rights
  - iv. Usually on Library web page
  - v. Advance gateways could provide search features
- d. Digital libraries of local contents
  - i. Preservation and storage
  - ii. Use
  - iii. Digitization of print documents

- iv. Organization of electronic documents
- v. Access control
- vi. Other services

## **VII. Conclusion**

The library and information centers facing challenges in providing information to satisfy the user. In an increasingly complex and global users. In an increasingly complex and global information environment, an ICT implementation in library is of vital importance in enabling end uses to search through to large quantities of information.