Traditional and IT Based Library Services and its Impact on LIS Professionals

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Introduction: Information is a fundamental resource which is essential for survival in today's competitive world. IT has revolutionized the field of library and information services. IT has developed to such a stage that it has given access to information at fingertips. UNESCO defines Information Technology as "The scientific, technological and engineering disciplines and the managerial techniques used in information handling and processing; their applications; computers and their interaction with men and machines and associated social, economic and cultural matters"(Peltu,1982). In short IT on LIS means as the application of computers and communication technologies to the acquisition, organization, storage, retrieval and dissemination of information process.

Traditional Library Services: The traditional libraries are always been as an intermediary between the information producer (and publisher) and the user. Generally library user services can be divided into two categories: library public user services and library technical user services. Library public user services are circulation, bibliographic instructions, reference and special collection. Library technical user services mainly focused on procedures and operations of maintaining, developing and supporting library collection and services behind the scene such as acquisition, cataloguing, classification, inter library loan, document delivery and serial systems.

Applications of I T in Libraries: Libraries are facing the challenges due to the information explosion as well as new technology of the IT in libraries. The librarian's preference of IT should include all those technologies which are expected to be used in the library activities/ operations and other library services for collection, processing, storage, retrieval and dissemination of recorded information, the fast developing information technologies have showered almost every areas of library. Use of IT in libraries, these are necessary in the following areas.

a) Library Management: Library management includes the following activities which will certainly be geared up by the use of these fast developments of IT : Classification, Cataloguing, Indexing, Abstracting, Database creation.

b) Library Automation: Library automation is the concept of reducing the manpower in all the library services so that any user can get desired information with the maximum comfort and at the lowest cost. Major areas of the automation can be classified into two –organizations: i) library databases and ii) All housekeeping operations of library.
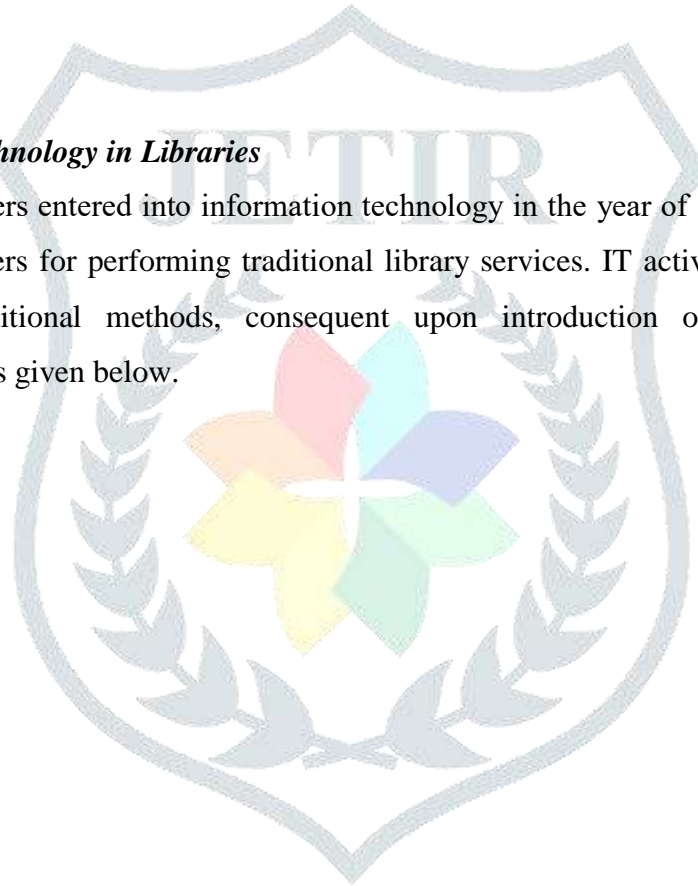
c) Library Networking: Library networking means a group of Libraries and information centers are interconnected for some common pattern or design for information exchange and communication with a view to improve efficiency of networked libraries.

d) Audio-Video Technology: It includes photography, microfilms, microfiches, audio and video tapes, CDs, DVD disk etc.

e) Technical Communication: Technical Communication means technical writing, editing, publishing, DTP systems etc.

Impact of Information Technology in Libraries

Information Resource Centers entered into information technology in the year of 1960's with the availability of general purpose computers for performing traditional library services. IT activities have undergone rapid transformations from traditional methods, consequent upon introduction of new technologies. The comparative information has given below.

Traditional Library Vs IT based library services

S.No	Library activities and services	Traditional Method	New Technology
1	Text entry, Editing and Composition	Writing, Typing	Word Processing, Text editing, Processing of OCR scan, Voice recognition
2	Reproduction (Replication)	Printing	Computer terminals, Display, Print
3	Storing	Manuscript, Paper-Print Media	Electronic Publishing, Magnetic Storage, Videotext, Computer Disc and Tele-text
4	Retrieval (Searching)	Shelving Catalogue, Catalogue Search, Indexes	Database management System, Information retrieval online, off-line
5	Circulation (Dissemination)	Hard Copies, Bibliographies, Abstracts	e-mail, Electronic document delivery, Video Discs, Teletext
6	Weeding	Physical weeding	Magnetic erasers, Optical erasers,

IT based library services

Information technology based library science services can organize three categories. These are:

    a) **Equipment and Enrichment**

    b) **User Services**

    c) **e- Resources**

a) **Equipment and Enrichment:** The equipment and enrichments are available in the innovative in the following areas:

    i) **Union Catalogue:** A union catalogue is a combined library catalogue describing the collections of a number of libraries. Union catalogues have been created in a range of

media, including book format, microform, cards and more recently, networked electronic databases. Union catalogues are useful to librarians, as they assist in locating and requesting materials from other libraries through inter library loan service.

    ii) **Facsimile:** A facsimile is a copy or reproduction of an old book, manuscript, map, art,or other item of historical value that is as true to the original source as possible. It differs from other forms of reproduction by attempting to replicate the source as accurately as possible in terms of scale, color, condition, and other

material qualities. For books and manuscripts, this also entails a complete copy of all pages; hence an incomplete copy is a "partial facsimile".

iii) ***Photocopy:*** A photocopier is a machine that makes paper copies of documents and other visual images quickly and cheaply. Most current photocopiers use a technology called xerography, a dry process using heat. Photocopying is widely used in library.

iv) ***Printing technology*****:** In computing, a printer is a peripheral which produces a text and/or graphics of documents stored in electronic form, usually on physical print media such as paper or transparencies.

v) ***Computers:*** Computer-based technologies have become dominant forces to shape and reshape the products and services the academic library has to offer. The success of the IT enabled services in the library is based on the efficiency of the equipment provided in the library i.e. most modern technology, not on the basis of number of equipments.

vi) ***CD-ROM:*** Presents a state-of-the-art review of the applications of CD-ROMs in academic libraries, embracing all aspects of library involvement and staffing implications. Concludes that CD-ROM is having a huge impact on the way academic libraries function and the services they offer to their users.

vii) ***Tele text:*** Teletext is a television information retrieval service developed in the United Kingdom in the early 1970s. It offers a range of text-based information, typically including national, international and sporting news, weather and TV schedules. Teletext information is broadcast in the vertical blanking interval between image frames in a broadcast television signal.

ix) ***Barcode:*** A barcode reader (or barcode scanner) is an electronic device for reading printed barcodes. Like a flatbed scanner, it consists of a light source, a lens and a light sensor translating optical impulses into electrical ones. Additionally, nearly all barcode readers contain decoder circuitry analyzing the barcode's image data provided by the sensor and sending the barcode's content to the scanner's output port.

x) ***Scanner*****:** In computing, an image scanner—often abbreviated to just scanner— is a device that optically scans images, printed text, handwriting, or an object, and converts it to a digital image.. Mechanically driven scanners that move the document are typically used for large-format documents, where a flatbed design would be impractical.

xi) ***RFID:*** Radio frequency identification is a term used for technologies utilizing radio waves for identifying individual items automatically. The most common way is storing a serial number identifying a product and related information on a microchip attached to an antenna. RFID is used very similar to bar codes.

xii) ***OPAC:*** An Online Public Access Catalog (OPAC) is an online database of material shield by a library or group of libraries. Users search a library catalog principally to locate books and other material physically located at a library.

b. User Services

i)   ***Document delivery services:*** The Document Delivery Service (DDS) delivers copies of journal articles and book chapters from participating Libraries. Fees apply for most Document Delivery Services. To fulfill the information needs of the end user through information/document supply is a document delivery service. This service is provided on No Profit - No Loss Basis and Expected to be prompt.

ii)   ***Interlibrary loan***: Inter library loan means a cooperative arrangement among libraries by which one library may borrow material from another library. In other words a loan of library materials by one library to another library.

iii)   ***CAS***: The purpose of a current-awareness service is to inform the users about new acquisitions in their libraries. Public libraries in particular have used display boards and shelves to draw attention to recent additions, and many libraries produce complete or selective lists for circulation to patrons. Some libraries have adopted a practice of selective dissemination of information .

iv)   ***SDI***: Selective dissemination of information ("SDI") was originally a phrase related to library and information science. SDI refers to tools and resources used to keep a user informed of new resources on specified topics. Selective Dissemination of Information (SDI) was a concept first described by Hans Peter Luhn of IBM in the 1950's.

v) Scanned copies: A scanning service for material not available electronically, which is held by the Library. This includes articles from journals and chapters from books. Users of the service should be aware that we operate within the restrictions of the Copyright Act.

vi)   ***Indexing and abstracting services:*** a method which is used to retrieve information form a table in memory or a file on a direct access store or the art of compiling an index. The preparation of abstracts, usually in a limited field, by an individual, an industrial organization of r restricted use or a commercial organization: the abstracts being published and supplied regularly to subscribers. Also the organization producing the abstracts. Such services may be either comprehensive or selective.

vii)   ***Bulletin board services:*** A Bulletin Board System, or BBS, is a computer system running software that allows users to connect and log in to the system using a terminal. Once logged in, a user can perform functions such as uploading and downloading software and data, reading news and bulletins, and exchanging messages with other users, either through electronic mail or in public message boards.

viii)   ***Chat services***: Online chat may refer to any kind of communication over the Internet, that offers an instantaneous transmission of text-based messages from sender to receiver, hence the delay for visual access to the sent message shall not hamper the flow of communications in any of the directions. Online chat may address as well point-to-point communications as well as multicast communications from one sender to many receivers.

ix)   ***Electronic services and e- resources***: The important fact is convincing many libraries to move towards digital e-resources, which are found to be less expensive and more useful for easy access. This is especially helpful to distant learners who have limited time to access the libraries from outside by internet

access to commonly available electronic resources, mainly CD-ROM, OPACs, E-Journals, E-Books, ETD and Internet, which are replacing the print media.

    x)   ***Digital library:*** A digital library is a library in which collections are stored in digital formats and accessible by computers. The digital content may be stored locally, or accessed remotely via computer networks. A digital library is a type of information retrieval system.

c.   *e- Resources*

    i)   ***Database*****:** A database is an organized collection of data for one or more purposes, usually in digital form. The data are typically organized to model relevant aspects of reality, in a way that supports processes requiring the information.

    ii)   ***Library website****:* Library website helps to recognize the facilities and information sources available in the library. In most of the library website online catalogue is included. Online catalogue helps to ascertain a client whether the information is available in the library.

    iii)   ***Audiovisual materials:*** The Audiovisual Collection contains a wide range of audiovisual material to support the research and study needs of staff and students.

    iv)   ***Internet:*** With the advent of digital revolution, communication has become easier and faster and decision are mad instantaneously. The internet which is the latest among the superhighways has cut down the distance and made it easier to have access to information to all people at all places and at all the times.

Impact of IT on LIS Professionals: Library professionals are confronting challenging dynamic technological environment demanding the extensive and effective utilization of IT in order to survive and meet the changing complex information needs of the user community. In addition to the traditional library and information management skills, librarians now need to possess additional skills and expertise, more so in the use of modern information and communication technologies, automated information services, electronic publication, digital information management and knowledge management. The IT based libraries are transforming very frequently. Therefore, the modern information professionals can contribute to the further development of ICT only if they update themselves too frequently and generate a superior knowledge base.

Conclusion: Information Technology has affected almost every sector of our life, bringing a change in the case of people's think interaction. This revolutionary change is also true in the case of libraries and information centres .libraries and information centres can hardly function today without computers and information technologies. In the modern world the library and information professions have been changed and adopted itself to the developments of IT. These technologies have acquired the do-or-die prominence; those who go with the advances will survive and others will become obsolete. Wee equipped library with the facilities of modern information technologies could satisfy the maximum demand of the present technology conscious users.

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