Research Paper   **Library Science**

IT Based Services in Libraries

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ABSTRACT

The advent of IT technology has turned the world towards rapid competition in applying its services. Educational field is also not remained untouched from IT. It was cataloging that brought computers and networking into libraries on a large scale more than forty year ago. The evolution of technical services during the past thirty years has been dra-matic. During the 1960s and 1970s, large libraries contributed their original cataloging to the database, which was largely dependent on the library of Congress's cataloging in the form of MARC tapes. Increasingly, the term used for this activity was shared cataloging, reflecting the fact that many libraries contributed data to the database. IT based services means services in which information technology is the base. Normally, the following services are based on IT in libraries.1. Circulation.2. Bar-Coding 3. e-journals 4. Networking (online accessing of information with computers) 5. Digitalization of reading materials. 6. Non-book materials. 7. Online bibliographic services 8. Inter library loan

Keywords:

1.1 Introduction:-

The advent of IT technology has turned the world towards rapid competition in applying its services. Educational field is also not remained untouched from IT. It has brought in an era of sentence competition unfolding many challenges and opportunities. The hitherto insipid environment has been replaced by a vibrant environment characterized by innovations and new approaches involving budgetary provision and long planning challenges thrown by this environment is sought to be met by several strategic responses such as restructuring of organization (Libraries), re-engineering of computer rooms and use of modern technology.

It was cataloging that brought computers and networking into libraries on a large scale more than forty year ago. The integrated library systems (ILS) computer systems and programmes that automate, various library operations and link them together in an almost seamless manner that most library have today in one form or another grew out of libraries efforts to provide cost-effective handling of acquisitions and cataloging activities during the 1960s, U.S. Librarians engaged in variety of efforts to create co-operative or centrulized technical services centers. Later efforts focused on multi-type regional or statewide programs. Today we see the results of these efforts in the Online Computer Library Center, (OCLC) and state and regional 'networks' that go well beyond technical service activities. We sometimes forget that roots of these programs were in technical services. Youngsters who began their careers in technical services at the time fully understood where these efforts would lead.

The evolution of technical services during the past thirty years has been dramatic. With all of the public and professional press hype about the Internet, electronic services, and the "Virtual Library," people tend to forget that it was in technical services that the technology "revolution" got its start in librar-ies. The paper-based type of catalogers and public catalogs led the way into the computer world for most libraries. Rep-resenting a library's holdings, the bibliographic database is still the heart of integrated library systems. That "database," manifested first in book form and then on card stock, and available today electronically, is the key that end-users need to unlock information resources of a library. And, it is technical services that provide both the key and the resources.

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In the past decade or so, libraries and producers have strug-gled with how to migrate from a print-only world to one that is a mix of paper and electronic resources. The electronic side is becoming more and more dominant and will continue to do so in the future, at least in some serial categories.

Special Features of Library/Bibliographical Data Han-dling

In computer processing and handling library/ bibliographical data, some special features, which are characteristic of them, should be taken note of while making choice of both hardware and software systems. They are as follows:

I. Nature of Data
- information largely textual in nature
- bibliographical record is of variable length
- fields may need to be grouped together and these groups may themselves repeat
- bibliographical files are often large and sometimes may include several thousands of items
- a field may repeat many times or may not exist at all.

II. Manner of Handling Bibliographical Data
- same item of information in a file may be simultaneously required by several users (staff/end users)
- extensive file updating may need to be carried out on a day-to-day basis
- outputs of many formats may need to be generated, at different operational points
- data may need to be sorted out in special sequences
- unusual characters such as diacritics may need to be handled.

These general comments about information technology should start to indicate some of the ways in which informa-tion technology can be a servant to information management.

Nevertheless, a simplistic comment may be 'if technology only does what could be done before, why bother? There is no doubt that information technology has permeated practices and procedures in most organizations.

INFORMATION TECHNOLOGY
Concept

Information Technology (IT) is electronic technologies used for collecting, storing, processing and communicating Information. There are two main categories—those which process information (such as computer systems); and those which disseminate information (such as telecommunication systems). IT has a wider connotation for librarians which include In addition technologies like, repro-micrographic technology, technical communication technologies; and database creation and use.

The term 'Information Technology' is widely used in UK, USA and India; 'Telematics' is used for same in France and 'Informatics' is widely used in Russia and other socialist countries.

Information Technology (IT) is one of the fastest growing industries in the world. The pace of development in IT has been tremendous. In the recent years, significant changes have taken place in computer hardware and software. Graphic User interface (GUI), sophisticated RDBMs packages and software development tools, artificial intelligence, open integrated systems leading to cooperative processing, internet technology are some of the features of the current computer technology.

Along with the development in computer hardware and software, the communications technology has also made tremendous progress. The satellite communications networks have changed the way in which people and organization interact with one another. The popularity and universality of the internet is a prominent example in this was earlier a critical parameter, will no longer be so. It is, therefore, natural that communications network has become a part of routine set up of any institution. Effective communications network enabling speedy and uninterrupted dissemination of information and decisions will be the key to effective and satisfactory performance. Needless to state that communications is no longer an esoteric and glamorous device. It is now required to be an integral part of the educational institutions library as well.

Scope

Dr. S.S. Murthy says that Information Technology is operative in the following environments :—

1. Library Management - Classification, cataloguing, indexing, database creation, CAS, SDI, etc;
2. Library Automation - Organising databases and automating library housekeeping operations;
3. Library Networking - Resource sharing and information dissemination;
4. Reprography - Photography, microfilms, microfiche, audio and video tapes, printing, optical discs, etc; and
5. Technical Communication - Technical writing, editing, publishing. DTP systems, etc.

❖ **Jennifer Rowley outlined the following four areas of Information Technology:**

1. Methods and tools for recording of knowledge— Computer storage media (such as magnetic tapes, discs, etc); optical storage media (such as CDs); and products like full-text databases etc;
2. Methods of keeping records—Computer hardware, soil ware, designing, creating and editing databases, etc;
3. Methods of indexing documents and information— Computerised indexes and index files; large machine readable catalogues, network of libraries; and
4. Methods of communicating knowledge-Electronic mail, facsimile transmission, electronic journals, teleconferencing, and data communication networks.

IT based services means services in which information technology is the base. Normally, the following services are based on IT in libraries.

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3. e-journals
4. Networking (online accessing of information with computers)
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I. Database Activity
- Creation of local database
- online access to remote databases
- use of external databases on local computer
- downloading of information for referral service
- Current awareness service/SDI
- reference service
- compilation of bibliographies
- bibliometric studies.

II. Library work
- cataloguing and catalogue production
- indexing and productionof indexes
- union catalogues
- bibliographies
- directories and inventories
- thesaurs construction
- serials control
- circulation
- acquisition.

Use of IT in Libraries:-
- Communication Technology
- Audio-Visual Technology
- Facsimile Transmission (FAX)
- Electronic Mail
- Reprographic, Micrographic, printing technology
- Microforms, Microfilms etc.

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