



AUTOMATION KEY FOR RE-CONSTRUCTION OF LIBRARIES

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ABSTRACT:

The paper discusses planning of automation and importance of automation in the era of 21st century of information revolution. It is a new science of collecting, storing, processing and transmitting. Recorded information in print or non-print format by using computers and method of communication.

INTRODUCTION :

Libraries and library professionals have been passing through a difficult phase due to rising apprehensions about their survival in the context of Information Technology, indifferent attitude of funding agencies and denial of full academic status to the librarians. All these issues have a direct impact on the identity, status and esteem of the profession. Library automation refers to the use of computers to serve the needs of library users. The operations of a library get a quantum jump with the introductions of computers. The computers help to provide fast and reliable access to the resources available in the library as well as elsewhere. The application of computers in the library operations avoids repetitive jobs and saves lot of labour time speed up operations, increase use of library resources. Computers not only used as a tool for processing the data, but also for data storage and accessing.

Library Automation means

Around us traditional library work consisting of acquisition, technical processing, serial control, circulation and reference services all entail time consuming manual work. Though these activities are essential to proper functioning of a library, they consume professional staff time that





might otherwise go towards user services and library development. Library computerization is now gaining importance necessitating the establishment of profession-wide standards. Comprehensive studies of library computer system world over include discussion of machine managed acquisition, cataloguing, serials control, circulation and bibliographic service modules. The literature in this area highlights major aspects of computer's role in the library environment. Similar to several aspects of library management, the demand for more and faster information services and the decline in library resources are compelling librarians are looking to maximize the benefits of automation by spreading computer use to as many aspects of library aspects of library activities as possible by taking advantage of developments in computer hardware and software and telecommunications.

Requirements Needs

There have always been some pre requisites for the execution and implementation of any project. Similarly, for any small or big library, Following are some of the basic needs requirements of library automation.

1. Finance
2. Hardware
3. Library Maintenance Software
4. Motivation of Library Staff
5. Willingness of the Heads

In addition to the above, there are many factors associated with such kinds of projects like overall work environment, support of the Head of the Institutions, Library committee and its Assistant, faculty members and other helping staff of library

Automation Planning

About the automation means it is not reducing the library or any other staffs, but rather it is the fundamental of re-thinking and radical





redesign of library process to achieve dramatic and technical improvement in critical measures of accuracy of performance such as costs, quality, service, speed and at last control than with previous systems. Planning for an automated system, no matter how big or small, should be part of an overall long-range plan for the library. Automation should always used as means to achieve overall better patron service. Careful planning for technology will assure that your automation project is sustainable, i.e. enhances the organizations ability to meet its services mission without disrupting the organizational stability of the institution. Planning for library automation has been defined as planning for integrated system that computerizes of traditional library functions using a common database. While this is still generally true, rapid technological changes is coming in force a re-examination of what it means to automation of library. As physical spatial and temporal barriers to acquiring information are crumbling, libraries must plan for a broader and more comprehensive approach to providing automated services in library.

While, doing the planning of automation of library, following some steps consider and needful.

1. **STRENGTH:** - A) The present scenario of library worldwide is – Vastly expanded storage of indexes, statistical data bases, and document databases within the library. B) Full text storage of documents, complete with full-text keyword searching and on demand printing. C) The ability to access remote databases across the country and the world and to download information and text on demand. D) Storage of pictorial and graphic material and availability of intelligent systems' providing transparent, one step searching and access to various library in house and remote databases.





2. **WEAKNESS:** - Even though this question seems to be very fundamental it is essential to emphasize this aspect, as the library automation is yet to take off in majority of the Indian libraries. Secondly, while justifying need for library automation more than cost effectiveness the benefits derived by the library users become the major consideration. To appreciate the advantages it becomes necessary to highlight the different levels of library automation.

Following are some considered as important factors for library automation.

1. Information explosion.
2. Increase in the collection of libraries.
3. Inability of users to explore the unlimited literature and information of their interest.
4. Advances in the computer and communication technology.
5. Wastage of users/staffs time in locating the information.
6. Provide wide access to resources within the libraries and elsewhere.
7. Better access.
8. Quality in service.
9. Resource sharing in efforts.
3. **OPPORTUNITIES:** - These capabilities and far more have become reality. Accordingly, today's integrated system must not only provide access to the traditional cataloging, circulation, OPAC and acquisitions, but must be capable of connecting through the local system into the systems of other vendors, remote bibliographic ASPECT databases, CD-ROM drives on a Local Area Network and the Internet. Users are expecting that their library systems be capable of, among the things: Providing seamless integration between system gateway and OPAC modules.
4. **THREATS:** - Threat could be innumerable but, some of these could be clearly projected. Overly looking into the SWOT analysis pattern it would





be very important & help to develop strategic vision for automation of library. The vision as-

1. Providing access for external users on the internet to the library's OPAC.
2. Monitoring the usage of remote databases that have been accessed through the gateway.
3. Accessing the Internet using a variety of graphical interface.

Hardware: - According to the requirement of the library there should be needs some things.

1. Server
2. UPS
3. CVT
4. Nodes with LAN Card
5. Hub

Input Devices: - Following some devices should be need.

Barcode Scanner with CCD, Laser Light with Temperature, Distance, Scanner, Sign Pad and DCU- Data Collecting Unit.

Output Devices: - Following some devices should be need.

Laser Printer, Dot Matrix, VDU (Visual Display Unit)

Storage Technology: - Magnetic Media, Optical Storage (CD-ROM, WORM), Data Cartridge.

Software: - Software is the term used to describe the types of programs or sets of instructions which enables a computer system to carry out the necessary processing.

Types: - i) Systems software or Operating Software. UNIX, LINUX, WINDOWS NT, WINDOWS XP, WINDOWS 7, WINDOWS8, SQL etc.

ii) Application software: - i) LIBSYS, LIBMAN, ALICE for WINDOWS, VTLS, HORIZON EXLIBSIS etc.

iii) Technical: - It is describes as follows-

- i) Can the software perform the necessary functions in an appropriate time?
- ii) Is the software able to run on the available hardware?





- iii) Is the software able to run under the available operating system?
- iv) What are the data limits.
- v) How easy is the software to used?
- vi) What communications protocols are supported?
- vii) Security in multi-users environment.
- viii) De-bugging facility and proper error messages while executing it.
- ix) Quality of documentation.
- x) Provision to obtain outputs in various formats.
- xi) Capability for future expansion and upgrading.

Areas of automation in the Libraries: - The information scientists have been very much affected by the significant capabilities of the computers in the field of information services. That is why the computer is being used in the following areas of the library functions for automation.

1. **House Keeping Operations:** - As a first step in planning process, it is desirable to formulate a model for computerization listing all items and prioritized in information systems being maintained on a manual basis by the library. For this exercise it is necessary to break down these procedures into their constituent parts. When further subdividing these activities, each item is to be considered of its functional elements. The house keeping operations of libraries are the acquisition, cataloguing, classification, circulation of books and other serial control.
2. **Information retrieval:** - The enormous growth in the published information and increasing specialized nature of the literature have resulted in serious problems in accessing information i.e. retrieving information on a given topic and in becoming aware of new pieces





of information. The use of computers has become an important application for solving these problems and permit access to the users. These access are called information retrieval Systems. Information Retrieval Systems for bibliographic applications are generally characterized by the fact that they permit very large record size, Boolean search capabilities and flexible output formatting.

3. **Computerized Indexes:** - The indexes are compiled by computers in KWIC Indexing. In computerized indexing the need of making content analysis is already become low and no need to analyze the whole texts. The document and information should be according to KWIC indexing. It is easily prepared in a very short time by computer with the aid of key punchers.
4. **Searching Process:** - The catalogues are prepared for searching the material in the libraries, but these are not fully capable to search out the required material out of large chunk of the literature. By the use of computers a file is prepared for all possible entries of the documents and the files is organized in such a way that all the queries may be answered. To provide the answer of various types of query, the entries prepared to provide access to the users are filled. The search for a record of a document may be done for various types of accesses in this system. It has become possible only due to the methods of searching by machine readable file, and which has become due to the efficiency of quick searching of the computers. The computer searches the information from the file and also test the same.
5. **International Information System:** - The application of the computers has given the help in established international system for information dissemination that was sometimes not possible. It is not difficult to compile universal bibliography today about which





Paul Outlet and Hennery La Fontaine thought first before a period of hundred years. To prepare the universal catalogue of scientific literature is also is difficult, hard and impossible today which royal society of London thought ones. In this way the computers has made possible the establishment of information systems of international levels such as INIS, AGRIS etc.

6. **Others Programmed:** - The automation has made various library and information services very simple and economical. It has also made the CAS and SDI services for the users very easy and active and many accesses of the users are fulfilled by it. To assure the success of your hard planning, training and public relation plan should be part of any automation project. Fortunately, training can being long before the system is installed. By involving stall at all levels in the analysis of operations, the identifications of needs, the setting of priorities, the development of specifications, and the evaluation of system, staff will gain much of the knowledge they needs as the planning progress. If you are new automated system is certainly an important ingredient in a successful planning effort. It you are implementing a public access catalog, it is probably the most important measure of success, public relations can allow you to accomplish three things.

- i) Make users aware of your new system and services.
- ii) Motivate them to use the system.
- iii) Train them in using the new system and services effectively.

Retrospective Conversion: - In the rush to acquire hardware and software, librarians often forget the their most valuable product is the library data base. The creation of a high quality machine-readable database provides the cornerstone upon which all present and future automation efforts rest. Vendors will come and go, hardware will become





obsolete, software will be replaced but a well constructed, well maintained database, with its accompanying local holdings, will be the libraries transportable and viable link from system to system.

Database readiness has several important facets: -

Catalogue record must be carefully converted from manual to machine readable formats.

Collection must be prepared for conversion through effective and on going weeding and inventory programmes.

Once converted, collection must be properly maintained as titles are added, withdrawn, transferred and re-catalogue.

With standard, files cannot easily be transferred from one automated system to another.

It is essential for libraries wishing to participate in resource sharing arrangements with other libraries, who will require such an adherence as a condition of participation.

CONCLUSION: -

An increasingly complex and global information environment, a automation of library is of vital importance in enabling end users to search through to large quantities of information. Effective resource sharing now days requires an infrastructure, which permits users to locate materials of interest in both print and electronic format. Access across multiple collections is becoming increasingly critical. Computer technology and software applications are changing and evolving at an incredibly rapid pace. At current rates of development. You can expect that by the time you install your carefully planned systems, capabilities





will be available that were only in planning while you were evaluating vendor proposal. Therefore, like automated system, plans must also change with time.

REFERENCES: -

Garg, B., 'Library Automation,' ILA Buletin, 2007, 40(1), 33-37.

ILA Bulletin Vol. 38 No. 2 April-June, 2002, Page No. 46.

Inflibnet Regional Training Program on Library Automation (IRTPLA) – 2003.

Krishan, Gopal. 'Modern Library Automation, Author Press, Delhi-1999.

Kumar, P.S.G. 'A Student Manual of Library & Information Science,' B.R. Publishing House, 2002, N. Delhi.

Sharma, P.L. 'Changing Role of Librarian in Digital Library Era & Need of Professional Skills, Efficiency & Competencies,' N. Delhi.

Shrivasta, Chetan 'Fundamental of Information Technology,' Kalyani Publications, Ludhiana, 2000.

Singh, S.P. & Kaula, P.N. 'Automation in Libraries,' Delhi Metropolitan Books, 1975. Pgs. 11-12. N. Delhi.

Tripathi, S.M. & Two others, 'Descriptive Questions in Library and Information Science, M.P. Books distribution Co. N. Delhi.

