Challenges of Library Automation Software

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Abstract

The word automation has been derived from a Greek word "which means something which has the power of spontaneous motion or self-movement. Automation, when used in a library context, refers to the computerization or mechanisation of all library activities. ALA Glossary of Library an Information Science defines automation as "The performance of an operation, a series of operations or a process by self-activating, self-controlling, or automatic means. Automation implies the use of automatic data processing equipment such as a computer or other labour saving devices." I would like to focus the significance of the Automation on Library and Impact of Automation on Library. This paper object that searching information about automation of Library. This Paper discussed about the term automation and Library automation software. Tries to describe the various issues or challenges in these day's related with library automation, which are directly or indirectly affect the library automation work or process in any institute. The Paper also traces and analyze problems area like lack of proper planning, lack of fund or economical resources, lack of resources and technology, lack of skilled or trained staff or professional and other related issues. The Paper briefly describes some point or remedies for proper implementation of library automation in library housekeeping and service sector. Important software problems faced by the library professionals in India are analysed and points out various compatibility and suitability issues in the selection of a library software. The paper also hints that these problems has affected the progress of computerisation of libraries.

KEYWORDS: Library Automation, Challenges, Problems, Automation, Issues and Remedies.

Introduction:

Library automation is the generic term that denotes applications of Information Communications Technologies (ICI) for performing manual operations in libraries of any type or size. Library automation process can adopt three routes - i) a piecemeal approach, converting individual operations one at a time (for example installation of Cataloguing module alone to offer OPAC) ii) the process can work towards the integrated system progressively, using a 'planned installation' approach (for example installation of Member management module and Circulation modules after the Cataloguing module); and iii) it can go directly for a fully integrated system to cover operations of all subsystems in the library. Therefore, theoretically, a typical library automation may or may not be integrated and may or may not be applied on a Local Area Network (or Intranet). In such automation process, the functions that may be automated are any or all of the followings: acquisition, cataloging; member management, circulation, serials control, inter library lending, and access to online public access catalogue. But the radical development in hardware, software and connectivity along with the reduced costs paved the path for integrated library automation systems (ILS). Presently, library automation processes are integrated

systems of a set of interlinked modules responsible for the management of different operational subsystems.

Though funding appears as the biggest problem faced by the libraries in India, the technical issues of manpower training, procurement of hardware and software, creation and maintenance of databases, etc., also raise serious hindrances in the way of automation. In the digital environment, both hardware and software have critical roles to play. As regards the software requirements, many of the Indian libraries, whether they are financially and technically sound or not, facing problems such as selection of good software, ensuring standards in the creation of databases, maintaining and updating the databases, improving the performance of Information Storage and Retrieval Systems, exchanging data between systems, migrating from one software to another etc. Library automation has been defined as 'integrated systems' that computerize an array of traditional library functions using a common database While this is still generally true, rapid technological change is forcing a re-examination of what It means to "Automate the library." This paper is aimed to know about the features of Library automation software, advantage and disadvantages of Library automation software, challenges in Library automation software and Trends of Library automation.

Objective of Research

(1) To find out different challenges of Library automation.

(2) To find out Impact of automation on library.

(3) To find out need for Library automation.

(4) To find out new Trends of Library automation.

(5) To find out what are the main drawbacks during automation.

Challenges of Library Automation software:

Computerized library service is likely to be beset with technological, economic and attitudinal problems peculiar to most developing countries. After a long period of gestation, the libraries in India are now in a take off stage of automation and modernisation. Financial and technical inabilities are the major issues they have to tackle while modernisation. In the digital environment, both hardware and software have critical roles to play. As regards the software requirements, many of the Indian libraries, whether they are financially and technically sound or not, facing problems such as selection of good software, ensuring standards in the creation of databases, maintaining and updating the databases, improving the performance of Information Storage and Retrieval Systems, exchanging data between systems, migrating from one software to another, etc.

1. Attitudinal Problems:

Computers appear very awesome to developing countries. They are powerful machines which can perform many functions and therefore offer a solution to the many types of manual inefficiency which often plague the developing countries. Among librarians there are two groups often give insufficient thought to the real value of the computer to the organization/institution and make uneconomical, haphazard use of the facility. The other group, still the majority in developing countries, lacks knowledge of the potential and consequences of library automation. There is constant

tension between this traditional librarian group and the 'new wave' librarians. Professionals of the majority group do not realize that computers cannot replace human intelligence. Due to the accuracy essential for data input in library services, the librarian/information scientist is indispensable. The National Library of Calcutta conducted an experiment to computerize the Indian National Bibliography in 1968. The scheme failed, however, because labour unions opposed it fearing retrenchment of library staff. Among developing countries, the attitudes of India's librarians are typical. They are not confident about automated services. Library staff should therefore be trained in programming and thus be made aware of the work involved in automation. They will then realize that automation will not take away their jobs. They will also realize that computers are machines which have their limitations as well as their advantages. The communication gap between the librarian and the computer specialist is another major hindrance in establishing any effective automated system in a library. There is often disagreement among the librarian, the programmer and the systems analyst. Librarians should be trained in computer programming and computer specialists should be versed in the special needs of library automation. Only then can a common language evolve among the three and projects are started. Administrative personnel assume a very important role in decision making. Their enthusiasm, support and conviction can help realize any new plan, just as their apathy and lack of understanding of the need for accurate and speedy information can jeopardize any effort.

2. Insufficient playing:

This very often results in insufficient planning, which in turn curbs the enthusiasm of imaginative information scientists and librarians. Due to this lack of appreciation, priorities are poorly ordered and funds are not well allocated. Administrators also have a tendency to underestimate or overestimate the capacity of automation. Any information system or service is planned for the best possible benefit to its users. Unless the users are mentally prepared to accept a new system, however, it cannot be effective. Indian users are still unfamiliar and overawed by computers, so computer awareness and interest has to be fostered to enable proper utilization of a system. Library automation is still neglected, however; it is an area which has not attracted young people with appropriate expertise. Training should be given to both the librarian and the computer specialist about each other's functions and possibilities. Both INSDOC and DRTC conduct courses on automation systems in libraries.

3. Technological Problems:

Technological problems include both the hardware, i.e., the computer as an instrument for information processing and the software, i.e. the methodology which is applied. The major problems faced today in terms of the hardware are due to the variety of computers being used in different types of research and business institutions. The computers, manufactured by various firm are not compatible. Developing countries sometimes receive sophisticated technology like computers as gifts from more developed countries; these often become obsolete from the manufacturer's point of view. Such machines are not only unsuitable for most complex work but any technical problems which come up cannot be repaired. Information retrieval work requires machines more sophisticated than those manufactured indigenously and few imported machines are capable of handling information retrieval applications.

4. Communication infrastructure:

The communication infrastructure of India is still not suitable for extensive on-line information facilities; the telephone system is not reliable enough to support an effective network facility. Software problems arise because programmes must be developed in terms of the machine on which they are to operate. Therefore, the incompatibility of equipment tends to make the software incompatible as well, especially when programmes are written in machine or assembly language. While using languages which are not machine bound, such as FORTRAN, COBOL, ALGOL, etc., may seem like a solution, in actual practice such languages cannot be interchanged without suitable modifications.

5. Economic Problems:

The major obstacle for any innovations in developing countries is the lack of resources. The initial cost of establishing a computer system is beyond the reach of most organizations and institutions. Library and information processing is done either with spare computer capacity made available by the institution itself, or with computer time hired from another institution. The cost of hiring computer time and storage space is very high and often cannot be justified at the management level by cost-benefit analysis. In India, libraries and information centres are attached to government organizations or research institutions, so library services cannot be calculated on a profit/loss basis. Long term benefits have to keep in mind while justifying such services. The libraries that have computerized some of their services or operations often have not taken such steps as a result of serious thought. Computerization has glamour of its own in the minds of many librarians. The duplication of work and the cost involved in these cases is obviously unjustifiable; the librarian should know which aspects of service should be mechanized. An example of an economically visible computerized library activity is the centralized acquisitions but also eliminates the cost of duplicate purchasing.

Conclusion :

The results from this research study show that computers have a major role in library automation, telecommunication and reprography technology have equally important role to play, because of the support they offer to library automation. The main objectives of the library automation are Speedily disposal of library work, Establishment of a well storage and retrieval system. Time and human power saving with qualitative services. Suitability for library cooperation and coordination development Simplicity in library management to meet the objectives. The problems faced by the professionals and authorities in selecting and using a library software can be solved to a great extent by establishing a machinery to analyse the software requirements and software's. This machinery can evaluate the available software's and make suitable recommendations for practical application. Such a system will not only provide guidelines in the selection of a standard and appropriate software and also boost the process of developing standard software's in future.

References:

1. Rarganathan, S.R. (1965). Academic library system: Fourth plan period, Library Science with a slant Documentation .
2. Kumar, P.S.G. (1987). Computerization of Indian libraries. New Delhi: B.R. Publishing Corporation.

3. Kaur, Amritpal, and Nandan, Waresh (2014). Impact of Information -Technology-on-University Libraries: A case study of Bhai Gurdas Library, Guru Nanak Dev University Library, Amritsar.
4. Singh, S:P. (2014). Doctoral Research Trends in Library & Information Science in India. 1st ed. Synergy books India: New Delhi.
5. Chopra, US (1999). Modern Information Technologies: Their Impact on library services. Ajay Verma Common Wealth Publications: New Delhi.
6. National Academy of Agricultural Research Management. Proceedings of the workshop on Software Review for Library Automation, Hyderahad.
7. Panigrahi, R (2000). Impact of Information Technology on Libraries. New Delhi: Ess Ess Publications.
8. Reddy, P. (2001). Automated management of Library collections. New Delhi: Ess Ess Publications.
9. R. Raina and M.U Raja,. “Management issues in library automation: An experience at IIML”. Lucknow