

CHAPTER NO. I
INTRODUCTION

I INTRODUCTION

1.1 Introduction of the IT and Library Automation :

This is an era of information revolution. Scientific, technical and other literature both in print and in electronic form has been increasing exponentially beyond imagination. Information technology could provide quantum jump in speedy accessibility, time saving, accuracy, use, generation and communication of information. The development in information technology and its application in library and information service for its all housekeeping day to day activities have effected drastic changes. In general, at information is collected, stored retrieved and disseminated for the benefit of actual and potential users of library system. Libraries and Information Centers are engaged in reassessing their sources and services on the one hand and all new sources and systems like CD-ROM, or multimedia, etc., on the other, to complement their existing computer capabilities in order to meet the changing need of clientele with improved services.

Information Technology has become a since-qua-non for the successful functioning of libraries and information centers, handling different type of information available in different forms. The process of automation of libraries and information centers need technology both in the form of hardware and software. Procurement of suitable hardware and suitable software is depends upon the area to be automated and the availability of latest technology.

The task of selecting suitable library software package for use of different in-house activities of various sections of a library is a challenging task for any library. Now a days there are many library software packages available in the market. [Mishra, R. K., (1999), p. 125-132].

A computer system consists of hardware, the electronic devices that are capable of computing and manipulating information, and software that carried out predefined tasks to complete a given job. As we know that, a computer cannot think or perform on its own. It performs operations like addition, subtraction, multiplication and division only when the user instructs it to do so. The user issues instructions and the CPU acts in accordance with the instructions. The sets of instructions, which control the sequence of operations, are known as programs, and collectively programs are called software. It is an intangible commodity, that is, the part of a computer system that users cannot touch.

We can equate hardware and software with human body and human intelligence, respectively. All human physical actions such as walking and eating are based on the thoughts and feelings, which is raised by the brain. If the brain does not raise thoughts and feelings, we do not perform any physical activity or movement. Similarly, the actions and functioning of every hardware equipment is driven by software. The combination of physical equipment (hardware) and logical instructions (software) gives modern computing systems power and versatility.

Library automation:

Library Automation which started in late 1970s and early 1980s Before the advent of computers, libraries usually used a card catalogue to index its holdings. Computers were used to automate the card catalogue, thus the term automation system. Automation of the catalogue saves the labor involved in resorting the card catalogue, keeping it up-to-date with respect to the collection, etc. Other tasks automated include checking out and checking in books, generating statistics and reports, acquisitions and subscriptions, indexing journal articles and linking to them, as well as racking inter library loans. Even though the Library Automation is essential, it is yet to take off in majority of the Indian libraries. 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.

For convenience it can be visualized at four levels:

1. Library cataloguing System
2. House Keeping Operations and Networking
3. Development of CD-ROM library / products
4. E-mail system and Internet

[<http://www.igidr.ac.in/lib/paper1.htm>].

1.2 Definition and Need of the Study:

Software is a generic term for organized collection of computer data and instructions. It is responsible for controlling, integrating, and managing the hardware components of a computer and to accomplish specific tasks. In other words, software tells the computer what to do and how to do it. For example, software instructs the hardware what to display on the user's screen, what kinds of output to take from the user, and what kinds of output to generate. Thus, software communicates with the hardware by organizing the control sequences, and the hardware carries out the instructions defined by the software. Software is a package of collective operational programmes. Each programme consists of a step by step instruction to attend a particular task. There are many software available in the market called commercial software whereas some organizations have gone for its in-house library software, which are going to fulfill their in-house keeping service requirements.

Evaluation of software is the process of examining in detail the various functions, features and their performance in view of the defined guidelines of user requirement. The purpose of software evaluation is to identify the missing features, present need of the library and its menu-wise functions. Whereas the selection of library software involves Money, Manpower, and System Analysis of library services.

At present some of the library software packages available in the market consist of an integrated set of modules like acquisition, cataloguing,

serial control, circulation, etc., while others are independent modules meant for automation of single function. (For example UNESCO supplied CDS/ISIS software package support only to information storage and retrieval not for house keeping operations of the libraries.)

One has to be more careful while selecting library software for library which will fulfill all house keeping services both from the view point of its functionality and the usability through some procedures. Also it should include all functions of any library most comfortably. Therefore, it is necessary to have library software selection and evaluation. [**Mishra, R. K., (1999), p. 125-132]**.

1.3 Scope of the Study:

The topic of the research is Use of Library Software in the engineering colleges affiliated to Shivaji University, Kolhapur: a study.

The study deals with Engineering College Libraries affiliated to Shivaji University, Kolhapur. In the geographical area of Shivaji University, Kolhapur includes Kolhapur, Sangli and Satara districts having 12 Engineering Colleges.

It is observed that (Annexure I) out of 12 Engineering Colleges 10 college libraries have introduced automation and remaining 2 college libraries under process of its automation.

The scope of this study thus, primarily confines to the present status and trend to library software, automation prevailing in the Engineering college libraries affiliated to Shivaji University, Kolhapur. However, there is limited scope to the Shivaji University only i.e., three districts.

1.4 Objectives of the Study:

The objectives of the present study are:-

- a) To study the present status or library automation in the Engineering colleges affiliated to Shivaji University, Kolhapur.
- b) To evaluate different library softwares used by the Engineering College Libraries.
- c) To review problem faced by the Engineering College Libraries while using the library software.
- d) To examine the efficiency, accuracy, flexibility, validity and security of the existing library software.
- e) To integrate all library activities towards ensuring an easy, speedy and accurate retrieval of information system.
- f) To suggest a unique and suitable library software for the Engineering College Libraries.

1.5 Hypotheses of the study:

Hypothesis is usually considered as the principal instrument in research. Its main function is to suggest new experiments and observations. In the light of the above objectives, the following hypotheses are outlined.

- 1) Good library software will help librarian for smooth in-house keeping activities.
- 2) Systematically developed library software will enhance the quality of library services.
- 3) Continuous in-house training to library staff members is going to help more confident in the minds of staff.
- 4) Quality in library software enhances the resource-sharing activities.

1.6 Research Methodology:

The Descriptive Research Method will be for this research, as it the study of Engineering college libraries affiliated to Shivaji University, Kolhapur.

Data sampling:

For the purpose of this study, the researcher has selected the Engineering Colleges affiliated to Shivaji University, Kolhapur. There are 12 Engineering Colleges located in the three Districts i.e. Kolhapur, Sangli and Satara. It is found that, authentic sample, which will lead for drawing prospective conclusions of the study.

Data Collection Tools:

Following data Collection tools will be used to collect the required information which will support the research as:

- a) Questionnaire
- b) Interview
- c) Observations

a) Questionnaire:

Questionnaire is a data collection tool. The researchers are most commonly using this tool for collecting the required data. In simple words, a questionnaire is a set of written questions for respondents to answer. According to Krishna Kumar (1992) “ a questionnaire is a written document listing a series of questions pertaining to the problem under study, to which the investigator requires the answers.”

b) Interview:

In simple words we can say that, survey interviewing is a face-to-face interaction with the respondents to get specific information. The questions may be pre-decided. According to Krishnan Kumar (1992) defines” interviewing is a process of personal interaction between a researcher and a respondent.”

c) Observations:

This is one of the best scientific tools to collect the data for research. Observation means watching carefully. The observer obtains information about the world around him for a definite purpose. On the basis of observations the data is collected, analysed, processed and used for the research purpose. It is one of the oldest tool is used by both the scientists and social scientists. Krishna Swamy defined observation as a systematic viewing of a specific phenomena in its proper setting for the specific proposed of gathering data for a particular study.

1.7 Review of Literature:

The review of previous literature on the topic chosen by the researcher is also an essential component of the introduction. The researcher has to demonstrate an understanding of the existing literature pertinent to its research study.

Review of the related literature is very essential for research. The study of related literature implies locating, reacting to and evaluating reports of researchers as well as casual observations and opinions related to the individual's planned research project.

The researcher has reviewed some literature survey consist of studies, articles in the journals and books are found on the study of Library Software which has been mentioned below.

Padhi, P. and Mohanty, S. K. (1996) has explained about the Design and Development of Computerised Circulation Control for a University Library System: an experiment in the book- Problems of Information Science.

Kochar, R. S. and Sudarshan, K. N. (1997) has mentioned the Automation in Libraries in the book title- Library Automation : issues and systems. [**Kochar, R. S., Sudarshan, K. N., (1997), p. 1-20]**.

Jagdeesha, S. and Mudhol, M. V. (1998) has outlined the stages of Library Automation in Indian Scenario in the book title- Library Automation Using Foxpro 2.0.[**Jagdeesha, S., and Mudhol, M. V., (1998), p. 42-59]**.

Chandraiah, I. (1999) has discussed about the Software for small libraries: problems and solutions in the article published in International Library Movement. [**Chandraiah, I., (1999), p. 135-139]**.

Mishra, R.K.(1999) has analyzed the library software selection in the article published in IASLIC Bulletin. He has tried to coin out the procedure for defining the software selection criteria for libraries. The Library Software selection is highlighted as the prime requirement during automation of any library. [**Mishra, R. K., (1999), p. 125-132]**.

Ademola, Ajayi (2000) has described about Library Computerization: oraganizational and professional roles in the article published in International Library Movement. He has focused on the application of modern information technology to handle library functions and activities. [**Ademola, Ajayi, (2000), p. 57-64]**.

Kawatra, P.S.(2000) has mentioned about Software Packages for LIS Operations and Services in the book- Library and Information Systems in the 21st Century. He has described on the total quality management in Library and Information Services and New Vistas in Information Technology in libraries.

Ramkrishnegowda, K.C. and Shankarappa B. (2000) has described about criteria for evaluation and selection of library software package in the article published in the Journal of Information Sciences. They have made an attempt to describe the importance software evaluation, its need, meaning, different criteria and procedures to be adopted in evaluating library software. [**Ramkrishnegowda, K. C., and Shankarappa, B., (2000), p. 121-131].**

Kadli, J.H., Kumbhar, I.B. and Kanamadi, S.T. (2002) has evaluated the computer-based Library system and Services in the article published in International Library movement. They have discussed on the factors responsible for computer-based library system and services. For the good Administration of library, computers are used at all levels of work. [**Kadli , J. H., Kumbhar, I. B., and Kanamadi, S. T., (2002), p. 16-23].**

Dhoke, V. and Vakil, S. (2003) has described about the User friendly library software and its necessity in the article published in the Journal of Information Technology. User friendly means that it is simple to understand, easy to handle, guides you, is fast to work on and offers minimum input maximum output. [**Dhoke, V., and Vakil, S., (2003),p. 61-63].**

Kochtaneek, T. R. and Matthews, J. R. (2004) has explored the Impact of Technology on Library Services in the book title- Library Automation Systems: from library automation to distributed information access solutions. [**Kochtaneek, T. R., and Matthews, J. R., (2004), p. 136-151].**

Prabha, N. (2004) has viewed the prospects of Library Automation in the book title- Automation in Academic Libraries. [**Prabha, N., (2004), p. 146-168]**.

Prabha, N. and Panda, K.C. (2005) has explained on the Problems and Prospects of Library Automation in the article published in International Library Movement. They have focused on the role of information which will be a pivotal one. New patterns are emerging and will hold the stage-sweeping out the old ones. [**Prabha, N., and Panda, K. C., (2005), p. 1-13]**.

Ehikhamenor, F. A. (2006) has described the Software Development Philosophy: a Nigerian perspective in the article published in International Information Communication and Education. [**Ehikhamenor, F. A., (2006) p. 204-209]**.

ITL Education solutions Ltd. (2006) has defined about the library software in detail in the book- Introduction to Information Technology.

Kabul Singh, Sandhu and Kulvir, Kaur (2007) has mentioned on Library Automation in the article published in International Library Movement. In modern times importance of libraries is well known. To handle the enormous amount of information, the library automation is highly essential. [**Kabul Singh, Sandhu and Kulvir, Kaur, (2007), p. 15-24]**.

Vasishta, S. (2007) has attempts to discuss the status of Library Automation and Networked Services: a case study of the Technical Deemed University Libraries in North India in the article published in IASLIC Bulletin.

Rao, R. P. and Padmini (2008) has reviewed the importance of Higher Technologies in the Corporate College Libraries in the article published in DLIBCOM. They feels that, before going to adopt any newer technology, it is better to evaluate the requirement, suitability, applicability and functional values.

In the website [http:// www.igidr.ac.in / lib / Paper1. htm](http://www.igidr.ac.in/lib/Paper1.htm)
Manjunath, G. K. has described about the Library Automation in detail in the research paper- Library Automation: why and how ?

In the website <http://www.autolib-india.net/> has provided the information about the AutoLib Software Systems which is useful for the Library Automation in the library.

In the website <http://www.librarysoft.com/companyF/home.htm>
has provided the information about the Library Software and Library Automation.

In the website **<http://www.slimpp.com/slim21site/introduction.htm>** has provided the detailed information about the System for Library Information Management (SLIM 21) library software.

In the website **<http://www.growthcompusoft.com/html/sw/librarymanagementsoftware/professionalli...>** has provided the information on the salient features of the LIBRARIAN- Library Management Software.

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