



Research Paper

Status of Library Automation and Networking in Select State Colleges of Himachal Pradesh: A Systematic Literature Review

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ABSTRACT

An academic library is the center of all academic activities of the parent academic institute. An Academic library is the soul of academic institutions and supports the teaching-learning process of the institution for attaining the goals of modern education. As this study is related to knowing the current status of Automation and Networking in select state college libraries of Himachal Pradesh, so this study is revolving around the college libraries. A college library serves an academic fraternity including students and faculties. The importance of a college library and the image of a college librarian depend, not only on the multiple services offered but also on the efficient ways by which the same are provided to the members. The status of a college library depends upon how efficiently the informational needs of its users are being satisfied. The paper presents findings from research into the state of library automation and networking at Himachal Pradesh's state colleges. The study would also look into the kind of computer-based resources and services that libraries make available to their patrons, such as e-journals, e-books, online periodicals, databases, CD-ROM databases, OPAC, OER, and so on. In addition, an assessment of the college libraries' IT infrastructure, staff, and use of library software packages will be conducted in order to better understand the libraries' administrative issues. The current review paper is being presented to discover the state of Automation and Networked based services in select state college Libraries of Himachal Pradesh and how far the users are being satisfied with these services. It is essentially a well-ordered review of papers carried out in the past to realize the state of automation and networked-based service in college libraries all around the world.

Keywords: Library Automation; Library Networking, Library Computerization, Computer Applications, CT Applications, College Libraries; Computer Hardware and Software, Manpower, Library Software Packages, Status; Problems, Himachal Pradesh.

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I. INTRODUCTION

College libraries serve a critical role in meeting the academic demands of college users, comprising of teachers and students. To provide the best service to the college community, librarians use a variety of methods and technology strategies in the storage and transmission of information. The numerous housekeeping activities are automated using information technology skills and software packages.

The following LIS sources of information were searched using different search strategies to identify relevant studies on college library automation and networking in Himachal Pradesh, India, and abroad such as Library and Information Science Abstracts (LISA), Google Scholar, UGC-Info net, full-text journals at www.emeraldinsight.com, Google search engine, and journal websites.

The literature review includes works published between 2000 and 2020 on library automation and networking in college libraries. The review is divided into four sections: the status of college library automation and networking, challenges in library automation and networking, use of library services, and user satisfaction with library automation and networked-based services, and problems faced by users in accessing the computer and network-based services.

1.1 LIBRARY AUTOMATION

A. Library automation may be defined as the application of automatic and semiautomatic data processing machines (computers) to perform traditional library housekeeping activities such as acquisition, circulation, cataloging, and reference and serials control. Today “Library Automation” is by far the most commonly used term to describe the mechanization of library activities using the computer. **(Uddin, 2009)**.

B. Encyclopedia of Library and Information sciences “Library Automation is the use of automatic and semiautomatic data processing machines to perform such traditional library activities as acquisitions, cataloging, circulation although these activities are not necessarily performed in traditional ways, the activities themselves are those traditionally associated with libraries; library automation may thus be distinguished from related fields such as information retrieval fields such as information retrieval, automatic indexing and abstracting and automatic textual analysis.” **(Kent, 1977)**.

C. McGraw Hill Encyclopedia of Science and Technology It defines automation as “a coined word having no precise generally accepted technical meaning but widely used to imply the concept, development, or use of highly automatic machinery or control systems”. **(McGraw, 1982)**

1.2 LIBRARY NETWORKING

According to the English Language Encyclopedic Unabridged Dictionary of Webster, a network is a device for receiving and transmitting information based on computers, computer terminals, printers, etc. **(Singh, 2007)**. Oxford Advanced Learner's Current English Dictionary states that a range of computers and other devices connected together so that equipment and knowledge can be exchanged across a network ' **(Hornby, 1968)**. Again, in other words, a network consists of two or more connected computers to share resources such as printers & CDs, etc., exchange data, or enable electronic communications. Cables, telephone lines, radio waves, satellites, or infrared light beams may connect the computers on a network. LAN (Local Area Network), MAN (Metropolitan Area Network), and WAN (Wide Area Network). (Source: <http://fcit.usf.edu/network/chap1/chap1.html>, Retrieved Nov 02, 2019) are common types of networks. The networked infrastructure phenomenon is growing more globally. Many academic institutions use networked infrastructure to access and use stored library resources locally and remotely. **(Rao and Choudhury, 2010)**. The rapid growth of IT, especially the internet and related technology, has opened up an entirely new platform for providing users with better information services and resources. The rapid growth of IT, especially the internet and related technology, has opened up an entirely new platform for providing users with better information services and resources. The advent of the Internet and the World Wide Web (WWW), the real blessing of electronic tools, was created as a new media for storing and delivering information. Electronic services can be accessed through the institutional membership of any Consortium such as the INDEST-AICTE Consortium, the UGC-INFONET Consortium, the N-LIST Consortium, etc., as well as individual e-journal subscriptions; **(Arora, 2009)**.

1.3 STATEMENT OF PROBLEM

The growth and complexity of literature in all branches of libraries in this knowledge explosion era has posed a problem in collecting, processing, and disseminating information. To solve these issues, the utility of computers and ICT technologies for better coordinating information resources and efficient services in libraries is increasingly agreed upon (Pandey, 1999).

It is high time to think about the ways the State College Libraries of hilly state are providing services to its users in the digital world. What is the nature of work in State College Libraries in Himachal Pradesh in the networked world? What form will libraries take? What packages of library application software are used in the above-mentioned libraries? What functions and facilities are automated in the library? Whether the libraries provide the users with networked services? Are the college libraries being provided with adequate funds? Are the college libraries getting full administrative support? These are all the questions that came to my mind. So, I feel like working on **STATUS OF LIBRARY AUTOMATION AND NETWORKING IN SELECT STATE COLLEGE LIBRARIES OF HIMACHAL PRADESH-A SYSTEMATIC REVIEW**

1.4 OBJECTIVES OF THE RESEARCH

This study will cover the status of library automation and networking in select state colleges of Himachal Pradesh. This study is focused only on professional and non-professional State Colleges of Himachal Pradesh. The main objectives of the study will be;

1. To find out the present Status of Library Automation and Networking in State Colleges of Himachal Pradesh.
- 2 To explore the use of Library services and user satisfaction levels with regard to Library Automation and Networked based services.
- 3 To find out the challenges faced by state college libraries in library automation and networking.
- 4 To identify the problems faced by users in accessing the computer and network-based services.

1.5 Research Methodology: The current study is a systematic review of the allied studies carried out in the past. The pertinent reports from various sources have been examined keeping in mind the objectives of the topic and a rational conclusion has been drawn.

The practicality of Research: Because this study is a review of previous relevant studies, it will be beneficial to have a conceptual grasp of the notion of automation and networking in college libraries. The study will serve as a framework for future empirical research that will contribute to the existing body of knowledge.

1.6 SCOPE OF STUDY:

The current study is restricted to the following topics:

- Literature published between the years 2000 and 2021 is gathered.
- Studies on the topic conducted in India and abroad are compared to see what similarities and differences there are in terms of the Status, Problems, and Prospects of Library Automation and Networking.
- ICT applications, integrated library automation software packages for library automation, academic library automation, and human aspects of library automation, the status of ICT infrastructure in libraries, problems, and prospects of library automation, and networking are some of the major topics covered in this study.

II. REVIEW OF LITERATURE:

A literature review is a description of the literature relevant to a particular field or topic. It gives an overview of what methods and methodologies are appropriate and useful. As such, it is not in itself primary research, but rather it reports on other findings. A literature review may be purely descriptive, as in an annotated bibliography, or it may provide a critical assessment of the literature in a particular field.

At International Level: Relevant Library automation and networking studies have been conducted outside India are presented as under:

collection. **Peter (2019)** his paper, “Effect of Library Automation on Performance of Librarians in Private Universities in South-West Nigeria” centered on the impact of library automation on the speedy execution of routine library works in South-West, Nigeria. The study revealed that 90 percent of private university libraries had automated their services. It is found that librarians' performance had been increased by 70% as a result of the automated library in private universities in southwest Nigeria. The study showed that there was a significant and positive relationship between library automation and librarians' performance in private university libraries ($r = .372, p < .01$). This study concluded that most private university libraries in South-West Nigeria were fully automated which allowed librarians to increase the quality of services rendered. This study recommended that university library managers need to further enlighten both the library staff and library users on the importance of library automation by organizing workshops, seminars and conferences to meet the current information needs of users. **Emasealu (2019)** the paper titled, “Automation of Academic Libraries and Web Development: A Reverie or Reality”, highlighted the intricacies of web development which have orchestrated a paradigm shift in academic libraries. The study explored literature on the status of automation of academic libraries and web development in Nigeria. It was established that the functions of library management software are abysmally under-utilized in academic libraries in Nigeria, thus, progression of automation projects remain a swinging pendulum and the libraries in Nigeria are yet to attain full automated status because only a few aspects of the library services have remained in partial automation state as they are unable to utilize fully important features of each of the stages of automation project. Based on the foregoing, this study sets to assess the status, challenges, and prospects of web development and library automation in Nigeria. The author, therefore, recommends that librarians should acquire the relevant training and plan strategically for all automation projects aimed at incorporating web development, automation, the intricacies of the web and ICTs into library services to fully utilize library management and the functions of the library management systems should be in line with web delve software/system and insist on training and retraining of library professionals of Nigeria and it will help to compete globally. **Sivankalai (2020)** This paper depicts the gloomy picture of Library Automation and other related services in nine colleges serving under the Institution. None of the 8 academic libraries is automated. The study commends that parental organization must give importance to the improvement of library automation and digital library enlargement through open-source software-based library automation systems. The author focuses on the need for strong Library automation and Networking system. He emphasized that librarians and staff must be trained enough so that they can smartly serve the users by automating the library resources on a priority basis and at the same time provide the users with Networked based services and resources. Most of the Librarians are agreeing that without library automation, no way to think about and implement the idea of Networking. It is recommended that the corresponding organizations of college libraries and library professionals must initiate footsteps in the direction of equipping their libraries with Information Communication Technology.

At National Level: several studies pertaining to College Library automation and networking carried out in India have been described in this section.

Velmurugan (2019) the Author advocates the importance of Library automation and networking. Automation and networking of libraries are still in their formative stages in India. Every year, INFLIBNET

organizes a conference CALIBER (Convention of Automation in Libraries) to discuss issues related to the computerization of academic libraries. According to him, the progress of INFLIBNET is far from satisfactory, and so the UGC should provide funds for hardware and software to accelerate the pace of library automation and networking. Library automation is a process that needs proper planning, timely implementation, and periodical evaluation. The librarian with the administrators has to set the priorities after analyzing the current status and future requirements. The selection of a suitable integrated library management package according to the needs of the users and the library is important. Retrospective conversion, OPAC, circulation and serials control, etc. should be conducted with care. Staff training and user education are keys to the success of the process. The academic achievement of a student is closely related to his/her ability to find, evaluate and use the required information according to the curriculum needs. An automated academic library with a variety of resources and user-oriented services can lead them to their goals. Many current awareness services like current additions, contents of books and journals, etc. can also be provided to users. So, it is a time to awaken and accept the presence of it and the automated library concept. UGC has done good efforts about it in academic libraries. **Surwade and Dalve (2021)** present an article emphasis on SOUL (Software for University Libraries) for Library Automation. The authors have analyzed the Definition of Library Automation, the Need for Library Automation, Why Automation, Advantages of Library Automation, An Overview of SOUL Software, Features of SOUL 2.0, SOUL Modules, etc. The author focuses on that at present there are 3756 colleges and university libraries that have installed the SOUL Software in India. However, Gujarat state is on the First rank and Maharashtra State is in Second Rank, the North-Eastern States is on the Third Rank, Madhya Pradesh is on the fourth and Andhra Pradesh is on the fifth for Installation of software. Gujarat has 998 installations of SOUL, Maharashtra has 522 installations, the North Eastern States has 338 Installations, Madhya Pradesh has 304 Installations and Andhra Pradesh has 301 installations. They further explained the features of the software that this software for University Libraries (SOUL) is state-of-the-art integrated library management software. SOUL Library automation systems have helped libraries to provide easy access to their collections through the use of computerized library catalogs, an overview of SOUL modules & their impact on Library automation.

The highlights of the review of the literature are:

As discussed above, the researcher has made a comprehensive review of the existing literature i.e., from the research works (Ph. D theses), the research papers presented in the Seminars/Conferences, and the research articles published in the journals. Besides these research contributions as reviewed above, the researcher further has also attempted to take a review of existing literature published in some of the basic books pertaining to the components related to the present research. Through the review of literature, it can be interpreted that no attempts have been made by the researchers so far to contribute to the present research topic undertaken by the researcher. So, the investigation presents the first attempt and it would be an original and significant contribution to the literature on the concerned subject. It is revealed through review literature that the area of the present study is unexplored and very few study related to this topic has been done.

III. Conclusion:

In India, college libraries have not yet acquired a high level of computerization. Even though librarians had a favorable attitude toward the use of ICT applications in the library, they needed comprehensive and suitable training to make the greatest use of ICT tools in the library automation and networking processes. The majority of libraries were administered by a single librarian, there was a scarcity of skilled IT specialists, and qualified library employees, a lack of IT awareness among library staff, and financial support from management. A smaller number of college libraries use serial control and acquisition units. In Indian college libraries, hardware and software resources were insufficient to begin automation activities at a fair pace. INFLIBNET, DELNET, and other metropolitan networks provide training for computer applications in libraries, and conferences are held on a regular basis to examine issues linked to library computerization. Over the last two-three decades, the challenges of library automation have remained the same. Librarians must stay up with the latest trends and advancements in library automation in order to select the best technology for their needs. Because library automation at all levels necessitates proper coordination between them, librarians must interface with computer professionals. Library automation is a collaborative effort including library professionals, authorities, and library users. In libraries, librarians must reorient themselves, think imaginatively, and incorporate new technologies.

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