Status of Integrated Library Management System: A Literature Review

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A B S T R A C T

The library is an organism that is constantly changing for the better in order to meet the issue of its patrons. A significant change in the public was brought about by the invention and development of computers.Along these lines, mechanization has emerged as a crucial demand. The computerization of libraries not only improves the image of the institution and its employees, but also offers additional services to users while utilizing the existing workforce. In simple words, library automation is the use of PCs and other PC-based devices and organizations to carry out various library tasks and restrictions. This study serves as an example of a survey of the literature on university libraries and associated themes. The study's components include a library orientation program, a comparative study of library software, integrated library systems, libraries, image analysis, imaging systems, universities libraries, information storage & retrieval systems, information science, open source software, information resources management, a digital library system, library and internet users, and library administrators.

Finally, it discusses the orientation program requirements in the university libraries, staff attitudes toward library automation, staff opinions on library automation, and users' opinions on library automation. It also discusses the literature produced on library automation in the university libraries. The work also discusses the creation of electronic resources and their use, as well as the effects of automation on users, employees, and library services.

Keywords: library; Library computerization; library services

1. INTRODUCTION

In 2017, Veeranjaneyulu researched the state of automation and digitization in Indian Agricultural University libraries. The degree of automation, the status of digitalization, membership in the KrishiKosh institutional repository, membership in the AgriCat Union Catalogue, and the use of RFID technology in agricultural libraries are just a few of the variables that were examined. According to the report, 80% of libraries at agricultural universities are automated.

In his paper titled "Status of library automation in the Institutions of Higher Studies in Punjab," published in 2015, Ajay Kamble provides an overview of the main aspects of automation activity and examines the condition of computer application in six different areas of library work today. For each topic under study, a brief explanation of automation's motivation was provided, along with a description of the current prevalent paradigms and samples of representative goods and services..

Raval (2013) focused mostly on issues that came up before and after automation. Technology, economics, and attitude issues are said to be the three main issues encountered during the pre- and post-automation process. Hardware and software issues are included in technological issues, financial issues include the costs associated with establishing and maintaining the software, and attitude issues include the librarian's ignorance of the potential and effects of library automation.

Upadhyay (2012) investigated the situation, issues, and future of library automation at Jabalpur City's engineering colleges. The analysis shows that few colleges are not automated, and the majority of colleges are just somewhat automated. The main issues encountered during the pre- and post-automation process are a lack of trained staff, a lack of management support, a lack of computer infrastructure, and a lack of funding. Both positive and negative prospects exist; the favorable prospects include increased output in terms of work and information retrieval, as well as assistance in expanding library services. The implementation will cost additional money, which is a negative possibility.

(2011) Wu, Yeh, Chen, and Chen At the time a book is borrowed or returned, the identification component on the book or media is being detected, which updates the circulation record and circulation status. The information of the book shelves presented by the library database information frequently does not accurately reflect the status of the books because some readers use the reference books, periodicals, and audio-visual media in the library; as a result, the status of books in the library cannot be precisely confirmed before the books are registered on the counter. The smart book shelf is built using RFID

(Radio Frequency Identification) technology by the "Integrated Library Service Application Platform" in this article, and it serves as the catalyst for updating the book's retrieval status in order to remove the counter bottleneck that prevents patrons from seeing the book's current circulation status at the library when they borrow or return it. The whole structure is favourable to raising the circulation efficiency of the library collections and enhancing reader pleasure thanks to the software agent system that integrates the information architecture of the library and provides intelligent service applications.

Tiwari (2002) noted that the issue of automation in the 1990s was becoming more and more diverse, especially in terms of resources, skills, and capacities. In this discipline, library automation has seen a significant transformation in recent years. In-house processing of conventional duties was the beginning of library automation, which later expanded to make use of computer and communication resources. A "library without walls" now exists, utilizing technology to increase services, resources, and connections between libraries and resources on a worldwide scale. According to IBM Digital Library, this "virtual library" is a reality where the universe of digital information is only a click away. Information kiosks with simple information access will be a part of the library automation system of the future. Human-computer interactions will be developed by information scientists and library scientists.

Hossein (1999) suggested that success and effectiveness in automated library systems are two interrelated components that all users usually seek when buying or creating a new system in his essay titled "Defining some criteria for the success of automated library systems." The selected 26 characteristics as criteria for the success of automated library systems play a significant role, according to the available resources, literature, and expert opinions on automated library systems. A 1993 survey looked at how Australian university librarians and systems managers felt about these standards. It turned out that the survey sample accepted 23 of these defined criteria while rejecting the remaining three. To further generalize the results, these standards would be examined by additional teams of library automation specialists.

2. INTEGRATED LIBRARY MANAGEMENT SYSTEM

Breeding (2012) talked about the evolution of the automation systems for libraries. He listed several possibilities, such as the modern platforms for library services and the proprietary and open source library systems. He admitted that web-based application software had become the preeminent computing option for library patrons. It also describes the redeployment of integrated library systems, which manage acquisitions, serials administration, and cataloguing modules through graphical user interfaces

The factors cited by Bryant & Ye (2012) led Pepperdine University Libraries to select Web-scale Management Services as their library system as the next-generation technology. An example of a web-scale management service. integrated library system that is "in the Cloud" and hosted by OCLC. One of them was Pepperdine. the first libraries to use WMS, and the writers of the essay concentrate on the circulation, holdings, course reserves, and implementation process. even despite WMS "not a wonderful system," feel that libraries will profit from the upcoming generation. of library technologies, like WMS.

Graves & Dresselhaus examined the Old Dominion University librarian of electronic resources for their 2012 study. Using Marshall Breeding's work, they expanded on the discovery environment at the library. They talked about the redesigned library website, the he development of a mobile website, an evaluation and reevaluation of the Integrated WorldCat Local's implementation and the Library System (ILS). The purpose of the The presentation emphasized the difficulties with the updated art of discovery in the library and the use of usage data to assess the program's effectiveness.

Various aspects of the implementation of the library automation project at any university library were presented by Birje, Khamkar, and Gurav (2011), and Anozie Stella Ngozi; Library Automation in Universities:...|121 Especially traditional university libraries. The research article describes a case study of the automation of the Barrister Balasaheb Kharderkar Library at Shivaji University to highlight some of the difficulties and solutions needed in a rural or semi-urban setting. They talked about the automation process's phased evolution, which includes retro-conversion, barcode code ID generation, member ID generation, and housekeeping operations. The authors hope that other professionals may benefit from hearing about their experiences.

Integrated Library Systems (ILS) outcomes were explored by Dougherty (2009). The author claims that there is a rise in user demand and expectations for Integrated Library Systems. The in-depth discussions cover the author's experience with library automation at Virginia Tech (VT) University, the circumstances that led to changes in the university's library system, an increasingly affluent user community, and the benefits of the ILS. Meeting business objectives is one of the reasons the ILS must change, and Ping Fu, a system librarian at Yale University, has argued the architectural philosophy of the ILS in-depth.

According to Pace (2009), less than ten years into the twenty-first century, it might be more accurate to say that library automation is getting close to its 80th birthday. It's time to reflect on the past and thoroughly evaluate the development. Library automation has advanced significantly since the implementation of a punch card circulation system at the University of Texas in 1936, thanks to the development and persistence of the MARC record, as well as the ebb and flow of approximately 75 distinct library automation providers. But for some, it hasn't advanced nearly far enough.

Zhonghong (2009) used a methodical approach to give an overview of the academic ILS industry and to highlight the crucial elements influencing the success of an ILS migration project. It highlights the difficulties and opportunities that academic libraries and ILS providers have in a setting where technology is advancing quickly and academic users are becoming more knowledgeable.

3. LIBRARY AUTOMATION SOFTWARES

Cho (2011) introduced the operational paradigm and next-generation SaaS-based library management system. Additionally, the thesis aims to explore the system's accessibility to knowledge-based services. The author examined operational problems with library management systems as well as trends in open library environments. It looks at the distinctions between ASP and SaaS reference models that are currently in use. There are additional case studies on recent applications of the methods. The study makes predictions about the outcomes when the SaaS model is completely implemented across the library network. Finally, the study provided an operational model for SaaS-based library management systems as well as their functional needs. The author of this paper provided a model of a SaaS-based system that the library network may use. The SaaS-based solution will improve local library operations' financial efficiency and provide new functionalities as needed. Additionally, its functionality that allows several libraries to use a single platform for resource sharing and knowledge-based services is being discussed.

According to Dhamdhere (2011), librarians use a variety of open-source programs for a variety of tasks, including content management, institutional repositories, digitalization, and library automation. One of these programs is called ABCD, which stands for Automation de Bibliotheca Centre's de Documentation. It meets practically all of the current demands of libraries in the modern day, regardless of size. It provides an answer to library automation using ISBD and regional formats. Its strong indexing and retrieval features are based on UNESCO's ISIS technology, and it has a web OPAC, a library portal, and an integrated meta-search and content management system to handle both online and offline digital resources as well as physical documents and media.

Information and communication technology (ICT) application statistics were supplied by Al-Ansari & Husain (2011). Most libraries have some level of automation. The most frequently automated sector was discovered to be the library catalog. More than one-fourth of libraries still run their operations and services entirely manually. The main barriers to ICT use in special libraries include a lack of sufficient staff, a lack of ICT training programs, and the organizations' low priority of libraries. In their work, they emphasize the suggestions and advice for further growth as well as the implications for the problems. It is Kuwait's first study on the use of ICT in specialized libraries. Researchers and decision-makers should be able to use its findings to enhance the current information infrastructure.

Al-Ansari & Husain (2011) provided information and communication technology (ICT) application statistics. Most libraries are automated to some extent. The library catalog was found to be the industry that gets automated the most frequently. More than one-fourth of libraries still conduct all of their business and provide all of their services manually. Lack of appropriate staff, a lack of ICT training programs, and organizations' low priority of libraries are the main obstacles to ICT use in special libraries. They place a strong emphasis on both the consequences for the issues at hand as well as suggestions and counsel for future development. It is the first study on ICT use in specialist libraries in Kuwait. Its conclusions ought to be useful to decision-makers and researchers in improving the current information infrastructure.

According to Godmar & Annette Bailey (2010), more libraries should include data from web services to improve their online public presentations; ways to make this integration easier are required. The method for such integration that is presented by their study is based on HTML widgets. They talked about three examples of systems that use this technique: Google Book Classes, Tactic Lookup, and MAJAX. These solutions are easily adaptable without the need for pricey hosting or programming expertise.

4. CHALLENGES AND GAINS IN LIBRARY AUTOMATION

Upadhyay (2012) investigated the situation, issues, and future of library automation at Jabalpur City's engineering colleges. The analysis shows that few colleges are not automated, and the majority of colleges are just somewhat automated. The biggest issues encountered both before and after automation are a lack of skilled staff, a lack of management support, a lack of computer infrastructure, and a lack of funding. Both positive and negative prospects exist; the favorable prospects include increased output in terms of work and information retrieval, as well as assistance in expanding library services. The implementation will cost more money, which is a drawback.

Raval (2013) focused mostly on the issues that came up before and after automation. The author claims that the three main issues encountered before and after automation are technological, economic, and psychological issues. Hardware and software concerns are included in technological issues, as are costs associated with establishing and maintaining the program. Attitude issues include the librarian's ignorance of the potential and effects of library automation.

5. CONCLUSION

A review of the literature reveals that India is just one country where there are many implementations of library automation and there are many previous publications on the subject. The most contemporary library automation and its applications, especially in India. According to a recent study, libraries have become more automated over the past 20 years in emerging nations. The Indian situation demonstrates that studies focus on issues that last over two decades. According to the Indian situation, studies primarily focus on the challenges that have been confronted for 20 years by administration, implementation, hardware, technical human resources, and funding while attempting to introduce automation in libraries. Overall, this collection of the literature review provides an overview of current developments in library automation and widespread adoption in all varieties of libraries both domestically and overseas.

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