

A STUDY ON LIBRARY AUTOMATION AND NETWORKING OF MAHATMA GANDHI KASHI VIDYAPITH, VARANASI

Chandra Kant Rawat¹, Dr. Ashok Kumar Upadhyay²

¹Research Scholar, Department of Library and Information Science, Mangalayatan University, Aligarh, U.P., India. E-mail: chandrakant.spiritual11@gmail.com

²Librarian & Associate Professor, Department of Library and Information Science, Mangalayatan University, Aligarh, U.P., India. E-mail: ashoka143@gmail.com

ABSTRACT

This study investigates the process of automating and networking the central library of Mahatma Gandhi Kashi Vidyapith, Varanasi. The study utilized two distinct sets of questionnaires, one specifically tailored for the librarian and another for the library clientele, in order to gather the necessary data. The researcher employed the methods of observation, interviews, and questionnaires to get the requisite data from the participants. The study indicates that the central library of MGKVP is partially automated and connected to a network. The study found that the central library of MGKVP utilizes the SOUL 2.0 software for library automation. The study indicates that the library offers Web-OPAC/OPAC services, however, library patrons do not utilize them frequently. The study demonstrates that library professionals possess information and communication technology (ICT) based competencies and expertise. The survey indicates that the librarian is partially satisfied with the automation and networking of the library. Evidence indicates that the majority of users are dissatisfied with the automated and networked services provided by the library.

Keywords: *Library Automation, Library Networking, MGKVP, Central Library, University Information Resources.*

INTRODUCTION

Automation and Networking are becoming increasingly important in libraries. Library automation is the systematic utilization of computers to gather, process, store, and retrieve information, as well as to execute other library-related functions. It can also refer to the accessibility of computer-related products and services.

Library Networking establishes connections between operational processes to exchange data and expertise. Connecting to different libraries and information centres is a requirement for all facets of automation and networking in libraries.

University libraries function as central locations for learning activities, enabling instructors and students to carry out efficient searches for knowledge. University libraries should have a good selection of books and

other materials for research, reading, and studying. Automation and networking have enabled university libraries to transition to paperless records. Networked and computerised libraries are taking the place of traditional libraries in modern libraries. Modern libraries and information centres playing an important role in enabling unhindered communication because the provision of information is now recognized as a user privilege.

CENTRAL LIBRARY, MAHATMA GANDHI KASHI VIDYAPITH, VARANASI

The Mahatma Gandhi Kashi Vidyapith (MGKVP) is located in Varanasi (U.P.), India, and it was founded in 1921. It was earlier known as Kashi Vidyapith, this subsequently changed its name to Mahatma Gandhi Kashi Vidyapith in 1995 and came under the administration of the Uttar Pradesh Government. It's one of the most prominent public state universities in Uttar Pradesh.

The Central Library of Mahatma Gandhi Kashi Vidyapith (MGKVP), was founded in 1921, It was previously known as Bhagwandas Swadhyaypith, and subsequently changed its name to the Dr. Bhagwandas Central Library. He was the university's first vice-chancellor and a well-known philosopher

LITERATURE REVIEW

Obiokafor, I.N., Abana, C.H.O., Nwajikwa, C.S. and Ogarlue, I.R., (2023) this study emphasises the significance of the system's elements and combinations in enabling the successful implementation of library automation within academic organisations. By prioritising these essential features, businesses may ensure that their library automation system is optimal for efficiency, effectiveness, and user satisfaction. Furthermore, our research emphasises the significance of including stakeholders at the deployment stage and meticulously choosing a suitable system management cycle to guarantee the continuous enhancement and maintenance of the system. The implementation of library automation systems has been shown to provide a multitude of advantages for higher education institutions. The aforementioned benefits encompass enhanced functionality of libraries, heightened user satisfaction, and augmented availability of information resources. To optimise the use of library automation, organisations can proficiently adopt this system by taking into account the various elements and sets that were recently examined in this research study.

Bhakti, M.A.C., Mantoro, T., Tarigan, W.H., Effendi, N.L. and Wandy, W., (2022). The successful implementation of the Library automation system has provided support to the educational institution. The Library automation system can now be accessed from both the server-localhost and the client-side. Collaboration between lecturers and students proves to be a highly effective and efficient approach for timely implementation, particularly when facilitated through extensive communication channels such as Microsoft Teams. The current phase of library implementation has not necessitated a significant allocation of human resources. In the subsequent phase, the implementation of additional library activities, such as training, necessitates a greater allocation of human and technological resources. The future agenda will involve enhancing the suitability of the wired-wireless Local Area Network (LAN).

Surwade, Y.P. and Patil, D.T., (2021) This study examines Library automation systems have become an essential component of academic libraries. In the current era of information technology, libraries have

undergone a transformation in their housekeeping operations, transitioning from old to modern practises. Automation plays a crucial role in streamlining many library activities, such as acquisition control, serial control, cataloguing, and circulation control. These tasks may now be efficiently accomplished within a matter of seconds, with just a simple press of a button. Furthermore, it has facilitated the assessment and enhancement of the library personnel. The overall management of libraries has been operating efficiently since the implementation of automation.

Sawant, D. and Patil, R., (2020) explored The process of automation is experiencing significant growth, with the emergence of intelligent apps representing a novel manifestation of this phenomenon. The effects of automation can be noticed across various layers, including software, hardware, and machine components. The implementation of automation has resulted in a decrease in human involvement across various domains, including manufacturing, transportation, essential services, security, resources, procedures, and more recently, technological innovation.

Jamwal, R. and Singh, N., (2019) The study is a survey-based evaluation that explores the perspectives of librarians, faculty members, and other relevant stakeholders regarding the role of library automation in fostering educational advancement. Academic libraries serve as repositories of extensive amounts of information, encompassing vast collections of books, which can be utilized to facilitate the advancement of education, research, innovation, community engagement, and collaborative endeavors. The implementation of integrated library systems resulted in enhanced efficiency and effectiveness of library operations, hence playing a significant role in facilitating national development.

Keerthana, G., Keerthika, V. and Chithrakumar, T., (2018) The paper discusses Automation refers to the utilization of machinery to facilitate efficient work processes and enhance productivity, hence reducing the dependency on human labor and optimizing time utilization. The development of automation has significantly transformed library systems, leading to their transition towards automated operations and services. Users are not need to engage in a manual search of each individual shelf in order to locate a book. Alternatively, individuals have the ability to conveniently access their books by use a desktop computer or mobile device. This article centers on the automation of library operations, encompassing the necessary needs and modules within the web application. The use of library automation, which initially commenced in the late 1970s within a limited number of specialized libraries, has now proliferated to encompass a majority of university libraries. There exist multiple justifications for the use of Library Automation. Library automation enables significant savings in effort, time, and resources that are required in the traditional method.

Singh, B., (2017) described that How a library should be improved to a higher level of automation or changed into an automated environment is covered in the current study. Automating human-performed library services is the focus of library automation. In the context of library administration, computerization and automation are sometimes used interchangeably; however, automation is a more general phrase than computerization. By using smart library services, a librarian may convert their library into an automated environment.

Chaithra, N. and Adhinarayanan, K., (2016) This study explores library automation, which is a method of operating a library system and providing regular services using computerised information processing. The management of library materials with broader access is aided by library automation. In response to the consequences and ramifications of technological advancement, library systems throughout the globe are currently undergoing a metamorphosis. In order to support library operations like housekeeping and information handling, libraries are using automation and networking to exchange information resources. India's library automation and networks are briefly discussed in this paper.

OBJECTIVES OF THE STUDY

The current study intends to accomplish the following objectives:-

1. To assess the current status of library automation and networking in central library of Mahatma Gandhi Kashi Vidyapith, Varanasi.
2. To find out the use of Web-OPAC/OPAC in central library of Mahatma Gandhi Kashi Vidyapith, Varanasi.
3. To find out the ICT based capabilities and skills of the library professionals.
4. To find out the problems faced by the librarian at the time of automation and networking.
5. To know the satisfaction level of users about the Library Automation and Networking.

SCOPE AND LIMITATIONS

The scope of the study is limited to the librarian and library users of the Mahatma Gandhi Kashi Vidyapith', Varanasi. The study is concerned about the library automation and networking.

RESEARCH METHODOLOGY

This study is based on survey (questionnaire) method. The study's data was collected using a combination of questionnaires, observations, and interviews. The questionnaires were designed into two sets: one for the librarian and the second for the library users to collect the necessary data from the respondents.

SAMPLE POPULATION

Samples have been chosen to apply the stratified random sampling method because it cannot be possible to gather enormous quantities of data in the under-study library. The questionnaires have been distributed directly to the librarian and the library users. First questionnaire distributed to the librarian, and second questionnaires were distributed to the 370 library users and 276 (74.59%) of the questionnaires were returned; of these, 18 (4.86%) were rejected due to incomplete responses from the respondents. Consequently, 258 (69.72%), questionnaires have been selected by the researcher for the study.

DATA ANALYSIS AND INTERPRETATION

The collected data was organised and processed using statistical methods,

LIBRARIAN (POINT OF VIEW)

Table 1: Library Staff of MGKVP

Designation	Number of Staff
Librarian	1
Deputy Librarian	0
Assistant Librarian	3
Cataloguer	4
Information Scientists/Officers	0
Professional/Technical Assistant	2
Semi Professional Assistant	0
Library Assistants	0
Library Clerks	0
Curators	0
Library Attendants	2
Any Other	4
Total	16

The table 1 shows that library staff of MGKVP, 1 librarian, 3 assistant librarian, 4 cataloguer, 2 professional/technical assistant, 2 library attendants and 4 any other staff.

Table 2: Library Collection of MGKVP

Type of Documents	No. of Documents for which Records are created
Books	250,000
Periodicals/Serials	0
Theses/Dissertations	60,000
Reports	0
Manuscripts	1,000
CD ROM databases	0
E-resources	10,000
Any Other (Govt. Publications)	0
Total	321,000

The table 2 provides an overview of the library collection of MGKVP has records for 321,000 documents, primarily consisting of 250,000 books, 60,000 theses/dissertations, and 1,000 manuscripts. the collections of MGKVP with substantial numbers of documents for which records are created.

Table 3: Library Budget of MGKVP

Document Resources	Years of Budget	
	2020 – 2021	2021 – 2022
Books	3,000,000	3,000,000
Periodicals/Serials	1,500,000	2,000,000
Other resources including online database	0	0
Equipments/Furniture	0	0
Maintenance and Binding	500,000	500,000
Other budget head	0	0
Total	5,000,000	5,500,000

The table 3 shows the budget allocated significant funds for central library of MGKVP, particularly for books, 30 lakh, periodicals/serials 15 lakh and maintainance and binding, 5 lakh with a total budget of 5,000,000 across all categories for the specified period 2020-2021. The budget allocated significant funds, particularly for books, 30 lakh, periodicals/serials 20 lakh and maintainance and binding, 5 lakh with a total budget of 5,500,000 across all categories for the specified period 2021-2022 by the University Grants Commission, Government of India.

Table 4: Status of Library Networks

University Library	Univ. Campus Network	Network Backbone			Network Bandwidth Capacity	Network Connectivity	Independent Lib. Network (INFLIBNET)	
	Yes/No	Cable	Optical Fibre	Wifi			Yes	No
MGKVP	Yes	×	✓	✓	02 Gbps	I-Net & WAN	✓	×

The table 4 presents information regarding the membership of MGKVP in various library networks, as well as details about their network infrastructure. Mahatma Gandhi Kashi Vidyapeeth (MGKVP), are members of library networks. MGKVP are connected to their university campus networks and employing optical fiber. MGKVP's network has a bandwidth capacity of 2 Gbps and is connected through an Intranet (I-Net) and Wide Area Network (WAN). Additionally, MGKVP are part of the Independent Library Network (INFLIBNET). The table provides insights into the network

infrastructure and connectivity of the MGKVP central library's, highlighting variations in technology adoption and network configurations among the university.

Table 5: Status of Library Automation & Networking

University Library	Whether your library is automated	If Yes, what is Present status			Automation Software Used	Is your library professional have ICT based capabilities and skills ?	Problems in Library Automation and Networking	Satisfaction with the Library Automation and Networking Services	
		Yes/No	Fully Automated	Partially Automated				Initial Stages	Satisfaction Level
MGKVP	Yes	×	✓	×	SOUL 2.0	Yes	Lack of adequate staff to handle Automation and Networking process	Fully Satisfied	×
								Partially Satisfied	✓
								Not Satisfied	×

The table 5 presents information regarding the current state of library automation and networking at the MGKVP central library. The central library of MGKVP is partially automated and utilized SOUL 2.0 software for library automation. Library professional have ICT based capabilities and skills. Librarian face problems in library automation and networking, its reason lack of adequate staff to handle

automation and networking process. Librarian, partially satisfied with the library automation and networking.

Table 6: Web-OPAC/OPAC system of MGKVP

University Library	OPAC On Web	Frequency to use OPAC				Have you obtained users opinion about your OPAC searches	If yes, what is their opinion?				
		Very Frequently	Frequently	Least Frequently	Rarely		Users Opinion				
	Yes/No					Yes/No	1	2	3	4	5
MGKVP	Yes	✓	×	×	×	Yes	×	✓	×	×	×

*** Users Opinion**

1= Searches are fast and accurate and they get information of their requirement immediately

2= Searches are slow, however accurate

3= Searches do not correspond to key words provided and have do not get accurate search results

4= Search failures are more,

5= Any other

The table 6 presents information regarding the Web-OPAC/OPAC system of MGKVP central library's. OPAC system available on web and library user's very frequently use it. The users opinion about OPAC, searches are slow, however accurate.

USERS (POINT OF VIEW)

Table 1. Frequency of Visit to the Library

Frequency	No. of Respondents
	Central Library of MGKVP
Daily	130(50.98%)
Weekly	15(5.81%)

Stochastic Modelling and Computational Sciences

Once in a Month	25(9.68%)
Occasionally	88(34.10%)
Total	258(100%)

It is clear from the table that out of 258 respondents 130, i.e., (50.98%) visit daily, followed by 15, i.e., (5.81%) visit weekly, followed by 25, i.e., (9.68%) Once in a Month, whereas 88, i.e., (34.10%) visit occasionally.

Table 2. Awareness of Library Automation and Networking

Response	No. of Respondents
	Central Library of MGKVP
Yes	106 (41.08%)
No	152 (58.92%)
Total	258 (100%)

According to the table, 106, i.e., (41.08%) users are aware of library automation and networking, whereas 152, i.e., (58.92%) are unaware.

Table 3 Awareness of WEB OPAC/OPAC and Searching the Documents

Response	No. of Respondents
	Central Library of MGKVP
Yes	55 (21.31%)
No	203 (78.69%)
Total	258 (100%)

It is clear from the table, 55 (21.31%) users are aware of WEB OPAC/OPAC and search the documents through it, while 203 (78.69%) users are not aware.

Table 4 Satisfaction Level with Overall Automated & Networked Services

Satisfaction Level	No. of Respondents
	Central Library of MGKVP
Fully Satisfied	18 (6.98%)
Partially Satisfied	40 (15.50%)
Not Satisfied	200 (77.52%)
Total	258 (100%)

It is clear from the data 18, i.e., (6.98%) respondents are fully satisfied with overall automated and networked services, followed by 40, i.e., (15.50%) Partially satisfied, whereas 200, i.e., (77.52%) are not satisfied with the Library Automation and Networking.

FINDINGS

Based on the analysis of the present data, the following are the findings of the study:-

- The MGKVP central library is partially automated and networked.
- The study identified the central library of MGKVP use SOUL 2.0 software for library automation.
- The study shows that Web-OPAC/OPAC service are available in the library and library users are not using frequently.
- The study shows that library professionals have ICT based capabilities and skills.
- It is clear from the data that librarian face problems in library automation and networking, because of lack of adequate staff to handle automation and networking process.
- The study shows that librarian is partially satisfied with the library automation and networking.
- Data shows that out of 258 respondents (77.52%) users are not satisfied with the automated and networked services of the library.

SUGGESTIONS

Based on the study's data analysis and interpretation, some suggestions proposed for enhancing library operations:

- Librarian ought to submit proposals for appropriate infrastructure that enables complete automation and networking.
- The library authorities ought to make sure that the right staffing pattern has been implemented in the library, as recommended by UGC, to offer adequate qualified and trained library staff to handle automation and networking processes and provide efficient services to the users.
- To enhance resource sharing, librarian ought to construct a website that includes information about the library's services, databases, functions, and other activities.

- The library ought to deliver high-speed internet connectivity. Students, teachers, scholars, and other members have complete access to the resources.

CONCLUSION

Library automation and networking necessitate carefully planned quick implementation and continuous monitoring. Librarians and authorities should develop strategies to evaluate present activity and forecast forthcoming requirements. Adopting an appropriate system for managing libraries will be essential for fulfilling the needs of both the institution and its users. During library operations like serial control, circulation, and OPAC. Staff training and user awareness are essential for the technique's successful implementation. Libraries with automated systems promote a pragmatic attitude. The librarian must be knowledgeable concerning available computer software and hardware. Libraries ought to utilize standard automation and database development software packages to make it easier to share library materials with other libraries. Precisely the consequence of shifting circumstances, it is an increasing willingness for recognition of the relevance of library automation and networking.

REFERENCES

1. Obiokafor, I.N., Abana, C.H.O., Nwajikwa, C.S. and Ogarlue, I.R. (2023). Strategies for implementing library automation in Anambra State Polytechnic Mgbakwu, Awka North, Nigeria: A review of best practices. *World Journal of Advanced Research and Reviews*, 18(2), pp.398-407.
2. Bhakti, M.A.C., Mantoro, T., Tarigan, W.H., Effendi, N.L. and Wandy, W. (2022). Elementary School Library Automation System Implementation. *Journal of Community Services: Sustainability and Empowerment*, 2(02), pp.22-29.
3. Surwade, Y.P. and Patil, D.T. (2021). SOUL 2.0 (Software for University Libraries) for Library Automation. *International Journal for Science and Advance Research in Technology*, 7(3), pp.72-76.
4. Sawant, D. and Patil, R. (2020). AD-LIB: automated library system. In *Inventive Communication and Computational Technologies: Proceedings of ICICCT 2019* (pp. 635-646). Springer Singapore.
5. Jamwal, R. and Singh, N. (2019). Emerging trend in software development in library automation and its impact. *International Journal of Scientific and Technical Advancements*, 5(1), pp.145-148.
6. Keerthana, G., Keerthika, V. and Chithrakumar, T. (2018). Library Automation System. *International Journal for Advance Research and Development*, 3(3), pp.283-286.
7. Singh, B. (2017). Strategic Library Automation: A Practical Approach. *Journal Of Advancements in Library Sciences*, 4(3), pp.1-5.
8. Chaithra, N. and Adhinarayanan, K. (2016). Automation and networking of college libraries with reference to degree college: Problems and prospects. *Journal of Library and Information Communication Technology*, 5(2), pp.46-56.

9. Varanasi, MGKVP. About University. Retrieved from http://www.mgkvp.ac.in/info/univ_university.html.
10. Central Library. MGKVP, Varanasi. Dr. Bhagwandas Central Library. Retrieved from http://www.mgkvp.ac.in/library/lib_library_profile.html.