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# Use of Library Automation Software in Engineering College Libraries in Vidarbha Region: A Study

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## Abstract:

This paper examines the use of library automation software in engineering college libraries in Vidarbha. A structured questionnaire was used to collect primary information from college libraries to understand the current status. A total of 60 engineering colleges were surveyed for this study, out of which 55 (91.66%) responded, while 5 college libraries did not respond. The findings of the study show that most of the autonomous colleges are automated. The findings of the study show that 26 (47.3%) college libraries have been automated. Out of these, 40.0% of the libraries using open source software have adopted 'open source' library automation software. The librarian should take the initiative, connect with others and professionally support the library for its development and up gradation of its skills.

Keywords: Library Automation, Engineering Library, Automation Software, Vidarbha

# 1. Introduction:

Computers, bar-coding systems, scanners, RFID, and the internet are all examples of electronic machines used in library automation. The primary objective of automation is to improve the collection and efficiency of existing services. Computers at libraries are used not only to process data, but also to store information to acquire and retrieve bibliographic information. A comprehensive library automation program is necessary to attain this goal. There are several commercial automation solutions and open source software available.

# 2. Review of Literature:

Dr. Parul Zaveri & Deepali Salve (2018) the present study is about the use of library automation software in college libraries in Mumbai. Using a survey method an attempt is made to find out which automation software is used, the impact of automation on library development, problems while handling library automation software and reasons for non-automation in the library. Findings indicated that most of the libraries are automated. Lack of trained manpower, financial crunch were some of the problems related to use and acquisition of the software. Ray Aswini Kumar & Ramesh, D.B. (2017) this paper describes the basic features of the most popular and leading open source software used in the library for different purposes. Here author also discuss about the advantages and limitations of open source software. Cibbarelli, P. (1999). In this study, choosing library automation software is made easier by understanding which



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products are made for a particular kind of library and by being aware of how many other librarians have determined that a given product is the best one for automating their libraries. **Chitra K.S (2020).** In these studies the use of library automation software in first-grade college libraries affiliated to the University of Mysore. A structured questionnaire was used to collect primary inputs from college libraries to understand the present status.

# **3.** Objective of the Study:

- 1. To study the availability of ICT Infrastructure for automation libraries.
- 2. To find out types of automation software adopted in engineering college libraries of Vidarbha Region.
- 3. To know the software package adopted by engineering college libraries of Vidarbha Region.
- 4. To find out which areas of library function are automated in the engineering college libraries
- 5. To study the availability of Internet Facility and WI-Fi Service in engineering college libraries of Vidarbha Region.

# 4. Research Methodology:

Data were collected from engineering colleges in eleven districts of Vidarbha Region. A structured questionnaire was used as an instrument in this study. The questionnaire was distributed to all the 60 librarians of engineering colleges in Vidarbha region. In addition to distributing the questionnaire, informal personal interviews were conducted with selected librarians and observation was also conducted in the libraries. A total of 55 duly filled questionnaires were received, which has a response rate of 91.66%. It was found that five college librarians did not respond. The data collected is tabulated using SPSS statistical software.

# 5. Data Analysis and Interpretation:

# 5.1 Availability of ICT Infrastructure:

Table No 5.1 Availability of ICT Infrastructure in the library

	Yes		No		Total		$\chi^2$ calculated
	Nos.	Per	Nos.	Per	Nos.	Per	
Computers	55	100.0	0	0.0	55	100.0	55*
Laptops	17	30.9	38	69.1	55	100.0	8.018*
Servers	42	76.4	13	23.6	55	100.0	15.291*
TCP / IP internet	33	60.0	22	40.0	55	100.0	2.2 <sup>NS</sup>
Modems	23	41.8	32	58.2	55	100.0	1.473 <sup>NS</sup>
Floppy disk drive/Pen Drive	34	61.8	21	38.2	55	100.0	3.073 <sup>NS</sup>
Barcode Reader	44	80.0	11	20.0	55	100.0	19.8*
UPS	50	90.9	5	9.1	55	100.0	36.818*
Scanner	48	87.3	7	12.7	55	100.0	30.564*
Multimedia Kit	15	27.3	40	72.7	55	100.0	11.364*
Dot Matrix	8	14.5	47	85.5	55	100.0	27.655*

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Inkjet	11	20.0	44	80.0	55	100.0	19.8*
Laser Printer	49	89.1	6	10.9	55	100.0	33.618*
Web camera	27	49.1	28	50.9	55	100.0	0.018 <sup>NS</sup>
OHP/ LCD	11	20.0	44	80.0	55	100.0	19.8*
CD/DVD Writer	25	45.5	30	54.5	55	100.0	0.455 <sup>NS</sup>
Xerox Machine	44	80.0	11	20.0	55	100.0	19.8*
Rooter bridge for data	7	12.7	18	873	55	100.0	30.564*
backup	/	12.7	40	07.5	55	100.0	

\*: p<0.05; NS: Not Significant

Above Table No. 5.1 shows information pertaining to availability of hardware in the engineering college libraries of study area.

- **Computers**: It is observed that 100% respondents stated that computers are available in their library.
- Laptops: It is observed that 30.9% respondents stated that Laptops are available in their library while according to 69.1% respondents Laptops are not available in library.
- Servers: It is observed that 76.4% respondents stated that Servers are available in their library while according to 23.6% respondents Servers are not available in library.
- **TCP** / **IP internet**: It is observed that 60.0% respondents stated that TCP / **IP** internet are available in their library while according to 40.0% respondents TCP / **IP** internet are not available in library.
- **Modems**: It is observed that 41.8% respondents stated that Modems are available in their library while according to 58.2% respondents Modems are not available in library.
- Floppy disk drive/Pen Drive: It is observed that 61.8% respondents stated that Floppy disk drive/Pen Drive are available in their library while according to 38.2% respondents Floppy disk drive/Pen Drive are not available in library.
- **Barcode Reader**: It is observed that 80.0% respondents stated that Barcode Reader are available in their library while according to 20.0% respondents Barcode Reader are not available in library.
- UPS: It is observed that 90.9% respondents stated that UPS are available in their library while according to 9.1% respondents UPS are not available in library.
- Scanner: It is observed that 87.3% respondents stated that Scanner are available in their library while according to 12.7% respondents Scanner are not available in library.
- **Multimedia Kit**: It is observed that 27.3% respondents stated that multimedia kit are available in their library while according to 72.7% respondents multimedia kit are not available in library.
- **Dot Matrix**: It is observed that 14.5% respondents stated that Dot matrix are available in their library while according to 85.5% respondents Dot Matrix are not available in library.
- **Inkjet**: It is observed that 20.0% respondents stated that Inkjet are available in their library while according to 80.0% respondents Inkjet are not available in library.



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- Laser Printer: It is observed that 89.1% respondents stated that Laser Printer are available • in their library while according to 10.9% respondents Laser Printer are not available in library.
- Web camera: It is observed that 49.1% respondents stated that Web camera are available in their library while according to 50.9% respondents Web camera are not available in library.
- OHP/ LCD: It is observed that 20.0% respondents stated that OHP/ LCD are available in ٠ their library while according to 80.0% respondents OHP/ LCD are not available in library.
- CD/DVD Writer: It is observed that 45.5% respondents stated that CD/DVD Writer are available in their library while according to 54.5% respondents CD/DVD Writer are not available in library.
- Xerox Machine: It is observed that 80.0% respondents stated that Xerox Machine are available in their library while according to 20.0% respondents Xerox Machine are not available in library.
- **Rooter bridge for data backup**: It is observed that 12.7% respondents stated that Rooter ٠ bridge for data backup are available in their library while according to 87.3% respondents Rooter bridge for data backup are not available in library.

On the basis of the study results it is evident that computers, UPS and laser printer facility is available in most of the engineering college libraries of Vidarbha region.

## 5.2 Availability of Internet Connectivity:

Response	Frequency	Percent			
Yes	55	100.0			
No	0	0.0			
Total	55	100.0			

Table No 5.2 Availability of internet connectivity in the library

 $\chi^2 = 55$ ; df: 1;  $\chi^2$  crit = 3.84; p < 0.05

Above Table No. 5.2 presents response of the library professionals of study area about availability of internet connectivity. Based on the data it is observed that according to 100.0% respondent's internet connection available in the library. In view of the study results, it is concluded that most of the engineering college libraries of Vidarbha region have internet connectivity available.

# 5.3 Availability of Wi-Fi Facility:

Table No 5.3 Availability of Wi-Fi facility in the campus

Response	Frequency	Percent			
Yes	49	89.1			
No	6	10.9			
Total	55	100.0			
$x^2 - 22(10, df, 1, x^2) = 2.04, \pi < 0.05$					

#### $\chi^2 = 33.618$ ; df: 1; $\chi^2_{crit} = 3.84$ ; p<0.05

Above Table No. 5.3 presents information pertaining to availability of Wi-Fi facilities in the campus of engineering colleges of Vidarbha region. Study result shows that 89.1%



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respondents stated that they have Wi-Fi facility in the campus while 50.9% respondents do not have Wi-Fi facilities in the campus. On the basis of the study results it is evident that most of the engineering colleges of Vidarbha region have Wi-Fi facility in the campus.

#### 5.4 Status of Automation:

Response	Frequency	Percent
Fully Automated	26	47.3
Partially automated	23	41.8
Initial stages	6	10.9
Total	55	100.0

Table No. 5.4 Status of Library Automation

Above Table No. 5.4 shows information pertaining to automation status of the engineering college libraries of study area. It is observed that 47.3% college libraries are completely automated while 41.8% college libraries are partially automated. Furthermore 10.9% college libraries are in the initial stage of automation.



Figure No. 5.1 Status of Library Automation

On the basis of the study results it is evident that most of the engineering college libraries of Vidarbha region are completely automated.

## 5.5 Automation Software Adopted:

Above **Table** shows information pertaining to software adopted in the engineering college libraries of study area.

- **SOUL:** It is observed that SOUL software is used in 9.1% libraries while SOUL software is not used in 90.9% libraries.
- **LIBSYS:** It is observed that LIBSYS software is used in 7.3% libraries while LIBSYS software is not used in 92.7% libraries.

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Table No 5.5 Library software Adopted by the library professionals							
	Yes		No		Total		$\chi^2$ calculated
	Nos.	Per	Nos.	Per	Nos.	Per	
SOUL	5	9.1	50	90.9	55	100.0	36.818 *
LIBSYS	4	7.3	51	92.7	55	100.0	40.164*
LIBRARIAN	1	1.8	54	98.2	55	100.0	51.073*
SLIM	4	7.3	51	92.7	55	100.0	40.164*
ILIMS	1	1.8	54	98.2	55	100.0	51.073*
LIBMAN	12	21.8	43	78.2	55	100.0	17.473*
LIBSUIT	1	1.8	54	98.2	55	100.0	51.073*
Any Other	25	45.5	30	54.5	55	100.0	0.455 <sup>NS</sup>

\*: p<0.05; NS: Not Significant

- LIBRARIAN: It is observed that LIBRARIAN software is used in 1.8% libraries while LIBRARIAN software is not used in 98.2% libraries.
- **SLIM:** It is observed that SLIM software is used in 7.3% libraries while SLIM software is not used in 92.7% libraries.
- **ILIMS:** It is observed that ILIMS software is used in 1.8% libraries while ILIMS software is not used in 98.2% libraries.
- **LIBMAN:** It is observed that LIBMAN software is used in 21.8% libraries while LIBMAN software is not used in 78.2% libraries.
- **LIBSUIT:** It is observed that LIBSUIT software is used in 1.8% libraries while LIBSUIT software is not used in 98.2% libraries.
- Any Other: It is observed that 45.5% libraries used other software, while 54.5% libraries not used any other software.

On the basis of the study results it is evident that most of the engineering college libraries of Vidarbha region use LIBMAN software.

## 5.6 Adopted of Open Source Software for Library Automation:

Above Figure No.5.2 shows information pertaining to use of open source software in the engineering college libraries of study area. It is observed that 40.0% libraries use open source software while 60.0% libraries do not use open source software for library automation. On the basis of the study results it is evident that most of the engineering college libraries of Vidarbha region do not use open source software for library automation.

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Above **Figure No:5.3** shows information pertaining to automation status of library modules used in the engineering college libraries of Vidarbha region.



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- Administration: According to 38.2% respondents library modules used for administration is partially automated, while 61.8% respondents stated that this module is fully automated.
- Acquisition: According to 20.0% respondents library modules used for acquisition is partially automated, while 80.0% respondents stated that this module is fully automated.
- **Circulation:** According to 14.5% respondents library modules used for circulation is partially automated, while 85.5% respondents stated that this module is fully automated.
- **Cataloguing:** According to 18.2% respondents library modules used for cataloguing is partially automated, while 18.8% respondents stated that this module is fully automated.
- Serial Control: According to 49.1% respondents library modules used for cataloguing is partially automated, while 50.9% respondents stated that this module is fully automated.
- Information Retrieval Services: According to 56.4% respondents library modules used for cataloguing is partially automated, while 43.6% respondents stated that this module is fully automated.
- **SDI** /**CAS Services:** According to 60.0% respondents library modules used for cataloguing is partially automated, while 40.0% respondents stated that this module is fully automated.
- **OPAC (Internal Access):** According to 14.5% respondents library modules used for cataloguing is partially automated, while 85.5% respondents stated that this module is fully automated.
- MIS: According to 50.9% respondents library modules used for cataloguing is partially automated, while 49.1% respondents stated that this module is fully automated.

On the basis of the study results it is evident that modules used for circulation, cataloguing and OPAC (Internal Access) in most of the libraries of engineering colleges of Vidarbha region are fully automated.

## **Conclusion:**

If there are any problems in handling the software and difficulties in automating libraries, librarians should discuss them in an open discussion forum, which will provide answers to the specifics and questions related to their library environment. This is a platform where experienced librarians provide answers. Librarians should take the initiative, thereby connecting with others and professionally increasing support for the development of libraries and promoting their skills.

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