



A COMPARATIVE STUDY OF AUTOMATION IN THE UNIVERSITY LIBRARIES OF GUJARAT AND RAJASTHAN

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Abstract

The paper focuses on one of the essential part of libraries. It focuses on automation in the university libraries. thefreedictionary.com defines automation as “The automatic operation or control of equipment, a process, or a system.” The automation in libraries means adopting the system of automatic control of system related to library. University libraries are generally taken as role model for other libraries. The paper compares automation in the university libraries of two progressive states of India namely Gujarat and Rajasthan.

Key Words: Automation, University library, computerization, University libraries of Gujarat, University libraries of Rajasthan

Introduction:

The use of computer is increasing day by day in every field. It has revolutionised the service and information sector. Librarians which are associated with information sector should also utilise computers. For providing quick services, computerization of librarians is essential and efforts in this direction have already been made. The paper is a comparative study of computerization of the university libraries in two important states of India viz. Gujarat and Rajasthan.

Gujarat is one of the most industrialized states of India and many universities have been established in the last two decades. It has about 33 universities including a central university, state universities, private universities and deemed universities. Rajasthan has an unusual diversity in its entire forms- people, customs, culture, costumes, music, manners, dialects, cuisine and physiography. Rajasthan provides abundant scope to explore it. It has about 48 universities including one central university, 14 state universities, 25 Private Universities and 8 deemed universities. The prime objectives of the universities are research,

teaching and community services, like other universities of the world. The university library plays a key supporting role in carrying out these objectives. Along with supporting the university, the university library has other functions too. As M.B. Line rightly says, "The function of the University Library is to bring together information of knowledge on one hand and human beings on the other." According to Kothari Commission recommendation on university libraries, the functions of libraries are (Bhatnagar):

- To provide necessary tools to the university to carry out research.
- To update teachers and students in their subjects.
- To provide necessary resources for successful education.
- To open the doors for the books and users.
- To encourage users to read.
- To make available the resources to the researchers.

With these as driving strength the university libraries of Gujarat and Rajasthan are working. To work more efficiently they need to update in terms of technology also. They need to use computer technology which is used by almost all service sectors. It is observed that computers are not new to universities and university libraries. They have been using it for one or the other purpose since long. The main focus of the paper is a comparative study of computerization of the university libraries in Gujarat and Rajasthan keeping in mind the following aspects.

1. Concept, requirement and process of computerization
2. Extent of computerization
3. Software and hardware used
4. Networking and Internet accessibility
5. Availability of e-sources, e-catalogue, and SOUL, OPAC services
6. Websites of universities and services available therein
7. Problems of computerization viz. security, back up, skilled professionals etc.
8. Recommendations

Research Methodology:

It is a kind of survey research. The researcher collected data from the university libraries of Gujarat and Rajasthan through visits, questionnaire, observation and personal interviews. Data is also collected from UGC-INFLIBNET. The scope of the study is limited to 11 government funded general stream universities out of about 33 universities in Gujarat and 6 randomly selected universities out of about 48 universities in Rajasthan. Further, the research is limited up to the issue of computerization of these libraries. The universities under the study are:

Universities from Gujarat

1. Bhavnagar University, Bhavnagar
2. Dr. Babasaheb Ambedkar Open University, Ahmedabad
3. Gujarat University, Ahmedabad
4. Gujarat Vidyapith Ahmedabad
5. Hemchandracharya North Gujarat University, Patan
6. S.P.University, V V Nagar

7. Saurashtra University, Rajkot
8. M.S. University, Vadodara
9. Vir Narmad South Gujarat University, Surat

Universities from Rajasthan

1. Swami Dayanand University, Ajmer
2. Rajasthan Agriculture University, Bikaner
3. Vardhman Mahaveer Open University, Kota
4. JNV University, Jodhpur
5. University of Rajasthan, Jaipur

Computerization:

As almost all service sectors are using computers to be efficient in their services, universities and university libraries also realized the need for computerization to serve in a better way. Gujarat Vidyapith, Ahmedabad is pioneer in computerization of university libraries. Computerization began at Gujarat Vidyapith in the year 1989. In Rajasthan, University of Rajasthan, Jaipur is pioneer in the computerization of university libraries. Computerization began at University of Rajasthan in the year 1998. In both the states other libraries also started computerization of their libraries. Two universities namely: KSKV University, Kachchh and Central University, Gandhinagar have not begun computerization, as they are newly established universities. Rajasthan Vidyapith, Udaipur has also not begun computerization. Table I shows the beginning of computerization in the various university libraries of Gujarat and Rajasthan.

1.	Name of the university	Beginning of computerization
2.	Gujarat Vidyapith Ahmedabad	1989
3.	S.P.University, V V Nagar	1997
4.	Suarashtra University, Rajkot	2000
5.	Hemchandracharya North Gujarat University, Patan	2001
6.	Vir Narmad South Gujarat University, Surat	2002
7.	Bhavnagar University, Bhavnagar	2005
8.	Dr. Babasaheb Ambedkar Open University, Ahmedabad	2005
9.	Gujart University, Ahmedabad	2005
10.	M.S. University, Vadodara	2005
11.	Swami Dayanand University	2000
12.	Rajasthan Agriculture University	2000
13.	Vardhman Mahaveer Open University	2007
14.	JNV University	2003
15.	University of Rajasthan	1998

Table I

Findings:

Analysis of the collected data shows that 100% university libraries in Gujarat and Rajasthan use computers in their operations. The application of computers in 45.45% libraries is at quite fullest, in 36.36% libraries is still limited, and in 18.18% is less than optimal and at an experimental level. The computers are more used for word processing and bibliographic databases. The major findings are summarized in the following table II:

- The number of universities selected under the study is more in Gujarat than Rajasthan.
- The number of university libraries having E mail addresses in Gujarat are higher than in Rajasthan.
- Classification methods of the universities of Gujarat are different from that of Rajasthan.
- Type of Access is different and open access is lower in universities of Gujarat.
- Audio listening and video facilities are less in Gujarat.
- Number of books, reference books, e-books, e-journals, dissertation, thesis, newspapers, CDs, audio cassettes and members are more in Gujarat than in Rajasthan.
- Total number of books is more in Rajasthan.
- Use of INFLIBNET is more in Gujarat.
- Number of hardware, software, data entries, computers, barcode reader, and scanner are more in Gujarat. Further, the number of licensed versions of software used is more in Gujarat.
- The websites of universities of Gujarat are more dynamic. Online facilities like form, membership, catalogue, access to journals, feedback, FAQs, bulletin board, list serve etc are more in Gujarat.
- Number of cybercafé at the university is more in Gujarat.
- Free access facility for the staff and students is more in the libraries of universities of Gujarat than that of Rajasthan.
- The security measures including facility of CCTV is more in the libraries of universities of Gujarat than that of Rajasthan.
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Sr. No	Computerization related function	% of Uni. Libraries in Gujarat with computerized function	% of Uni. Libraries in Rajasthan with computerized function
1.	Email address	77.78%	40.00%
2.	Classification System: DDC	66.67%	40.00%
3.	Type of Access: Open	55.56%	100.00%
4.	Audio Listening	22.22%	80.00%
5.	Watching Video Facility in library	33.33%	80.00%
6.	Average the E-books	676.56 (Average of total)	00.00 (Average of total)
7.	Online journal access	1885.67 (Average of total)	1785 (Average of total)
8.	Collection of Cds	257.11 (Average of total)	116.20 (Average of total)
9.	Computer literate staff	2.89 %	3.80 %
10.	Computerized Library	100%	60.00%

11.	Computerized Library with help from INFLIBNET	88.89%	40.00%
12.	Security hardware	44.44%	00.00%
13.	Security software	44.44%	00.00%
14.	Data entry by library staff	88.89%	40.00%
15.	Complete Computerization	66.67%	80.00%
16.	Computers	25.22 (Average of total)	12.60 (Average of total)
17.	Printers	4.44 (Average of total)	1.60 (Average of total)
18.	Barcode Reader	1.67 (Average of total)	0.80 (Average of total)
19.	Scanner	1.00 (Average of total)	0.60 (Average of total)
20.	Separate server room	77.78	60.00
21.	Separate website of	44.44%	20.00%
22.	Web OPAC facility	33.33%	20.00%
23.	Website Statics	22.22%	00.00%
24.	Dynamic Web site	33.33%	20.00%
25.	Users Experience Website	11.11%	00.00%
26.	Web Scrap Post Facility	11.11%	00.00%
27.	Application Forms in	22.22%	20.00%
28.	Web bulletin available in website	22.22%	00.00%
29.	List Serve in Website	11.11%	20.00%
30.	Feedback in Website	22.22%	20.00%
31.	FAQ available on website	11.11%	00.00%
32.	Online membership	22.22%	00.00%
33.	Internet facility	88.89%	60.00%
34.	Cyber Café / Internet	77.78%	60.00%
35.	Online	66.67%	00.00%
36.	Use of Library Software	88.89%	40.00%
37.	Online Journal Access	77.78%	60.00%
38.	Online Collaboration for sources	66.67%	40.00%
39.	Use of SOUL for computerization	100.00%	60.00%
40.	Licensed Software	100.00%	80.00%
41.	Library automaton software as per international	100.00%	60.00%
42.	Computerized Acquisition	100.00%	80.00%
43.	Computerized Cataloguing	100.00%	80.00%
44.	Back Up and Import-Export	100.00%	80.00%
45.	Computerized MARK	100.00%	80.00%
46.	Computerized Circulation	100.00%	80.00%
47.	User Services	100.00%	80.00%
48.	Web OPAC	100.00%	80.00%
49.	CCTV	44.44%	20.00%

Table II

It can fairly be said that University libraries in Gujarat and Rajasthan use SOUL software for their computerization. Internet facility is available in the libraries. They have security software and use licensed software. They use computers for acquisition, cataloguing and back up. Only a few libraries have scrap and feedback post facility.

Challenges of Computerization:

India is still a developing country. Availability of adequate resources is one of the biggest problems. It affects computerization of university libraries also. Computerization of the libraries has begun in 1989. It is still in infant stage. While collecting data, researcher identified number of problems related to computerization of university libraries in Gujarat and Rajasthan. Following are the challenges of computerization:

- **Lack of computer literate staff and psychology of the existing staff:** University libraries do not have necessary computer literate staff. The existing staff is almost old and not computer literate. They hesitate to learn computer skills. Sometimes they do not trust computers. They still trust manual works. “Research results show that, although the use of electronic information increases job satisfaction, confidence, and the effectiveness of librarians in their work, lack of technical expertise can be very frustrating to the librarians” (Edwards). “Only one librarian is formally trained to initiate, develop, implement, and maintain computerized applications in the entire university library system. Those who had been trained gain only limited, or no access, to the packages in which they had been trained. Inquisitive users with IT skills cause serious dissatisfaction to the library staff” (Bii).
- **No training** at specific intervals for computer skills and lack of motivation required.
- **Lack of necessary staff.** University libraries do not have sanctioned staff also.
- **Lack of Fund:** Computerization requires lot of funding. It requires regular updating in hardware and software. It needs regular spending and funds. Funding from UGC, Central and State Governments is not sufficient.
- **Lack of electricity** at some places creates a big hurdle. Even though it is computerized people have to work manually. Electricity generator is not affordable.
- **Maintenance** of computers is headache. Experts are not easily available. Poor maintenance and update is a problem.
- Management has to **depend on computer skilled person.**
- **Security** of data and software is also a threat. One needs to be cautious about it.
- Indian is a **multi-lingual** country. Data entry and retrieval in other Indian languages than English language is a problem.
- **Temperature** in India is very hot. Computerized libraries need to be air conditioned. It again requires lots of fund.

Recommendations and Conclusion:

The following are the humble recommendations and conclusion based on the research:

- There is a need of training and education on computer literacy. But it should not be overemphasized. The accomplishment of computerization of the university library depends mainly on the skill of staff to enable and device the process. Appropriate, regular, and steady in-house computer training is a needed. The training should focus on computer literacy, psychological aspects and culture.
- UGC and government should make sufficient funds available to support the computerization and maintenance of it by university libraries.
- Central agency like INFLIBNET should be a nodal agency for hardware and software purchase and installation. So standards can be maintained.
- Library staff should be motivated for computerization and use of it.
- Computerized systems are dynamic rather than static. So it is important in planning for computerization, that hardware and software be selected which are sufficiently flexible to meet both the present and future needs. The hardware chosen must have the capacity to handle growth of the system for at least three to five years. The software chosen must also be flexible enough to accommodate additions and/ or changes to the system as need arises (Johnson).
- SOUL software should develop Indian language support.
- There should be networking between all the university libraries of the state. It can further be networked with national or international resources.
- Seminars and workshops should be organized to create awareness about the potential of computerization.
- Better security software and hardware should be purchased by the libraries.
- Higher bandwidth internet connections should be provided.
- Computer literacy should be made a part of library professional's syllabus and requirement for appointment.

Present age is known as an information age. Everything is heavily dependent on information. One needs efficient information management system to manage information explosion. University libraries will play a key role in this. There is a need to strengthen them to play their role more effectively and efficiently and computerization of libraries will be a revolutionary step in this direction. National efforts are needed for this.

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