By

S. D. Vyas

Librarian

Banasthali Vidyapith

Banasthali-304022

E-mail: sdvyas15@yahoo.com

# **ABSTRACT**

A survey was conducted in 12 state universities as well as deemed university institutions of Rajasthan to study the status of library automation. IIT Delhi Library was also sent a questionnaire to act as a role model to Rajasthan university libraries. The survey attempts to find out the following aspect of library automation: availability of reading material, financial support to library automation, hardware configuration in libraries, use of application software, initiation of library automation, status of house database preparation, user services, housekeeping operations, networking accessibility of libraries, problems in computerization and networking, assessment of computer applications and networking, and measurement of satisfaction regarding automation of information system. It concludes that the university libraries are interested in library automation. But INFLIBNET should speed up to attend to the grievances of SOUL users. INFLIBNET should also provide multilingual script to SOUL software to speed up database preparation. Lastly UGC should consider sanctioning a post of Information Scientist and a Technical Assistant.

KEYWORDS: Library automation, University libraries-Rajasthan, Library collection, Information technology.

## 0. INTRODUCTION

A new information society has emerged in which electronic information is playing a key role. Information society is getting all help from information technology in occupying a centre stage role. Information technology (IT) is the modern science of collecting, storing, manipulating, processing and communicating information. IT includes technologies which are used in collection, processing, storage, retrieval and dissemination of recorded information. The use of machines have relieved librarians from drudgery and saved users' valuable time.

Comparatively academic libraries in India have gone slowly towards automation.. INFLIBNET initiated to support automation activities of academic libraries. Financial support for library automation is strengthening academic libraries to face challenges of

Application of Information Technology in University Libraries of Rajasthan: A Survey Report

modern times. In Rajasthan automation scene of academic libraries is dismal so far. There is now realization that academic libraries should look modern. The present survey study probes library automation in the university libraries of Rajasthan.

In Rajasthan there are now 15 universities. But for our survey study purpose, we have taken into account only 12 universities which are listed below -

## S.No. Name of the Universities

- 1. Banasthali Vidyapith (BVB) (1983), Banasthali
- 2. Birla Institute of Technology and Science (BITS) (1964), Pilani
- 3. Indian Institute of Technology (IITD) (1961), Delhi
- 4. Jai Narayan Vyas University (JNVU) (1962), Jodhpur
- 5. Jain Vishwa Bharati Institute (JVBI) (1991), Ladnun
- Kota Open University (KOU) (1987), Kota
- 7. Maharshi Dayanand Saraswati University (MDSU) (1987), Ajmer
- 8. Malavia National Institute of Technology (MNIT) (2002), Jaipur
- 9. Mohan Lal Sukhadia University (MLSU) (1962), Udaipur
- 10. Rajasthan Agricultural University (RAU) (1987), Bikaner
- 11. Rajasthan University (RUJ) (1947), Jaipur
- 12. Rajasthan Vidyapith (RVU) (1987), Udaipur.

IIT Delhi was also sent a questionnaire because it works as a role model to Rajasthan academic libraries. However the following universities failed to respond to survey questionnaire.

- 1. Jai Narayan Vyas University, Jodhpur
- 2. Rajasthan Agricultural University, Bikaner

The above responding universities have computers installed in their libraries except Rajasthan Vidyapith, Udaipur. Though JNVU has not responded to our survey it has installed computers in the library.

The slow pace of IT in Indian libraries is because of the following reasons which is equally true in case of Rajasthan

- 1. Academic libraries function in a relatively less autonomous environment.
- 2. Academic libraries are comparatively smaller unit within a larger setup.
- 3. Academic libraries have to compete for scarce resources

- Application of Information Technology in University Libraries of Rajasthan: A Survey Report
- 4. Undergraduates outnumber postgraduates, faculty and research staff, and lastly
- 5. Academic libraries are not under as much pressure to improve their services as are scientific and technical libraries (I)

Among the above respondents, Rajasthan Vidyapith has not done anything about library automation. The Vidyapith has received the grant from INFLIBNET for library automation, but has failed to acquire necessary minimum systems, server, UPS and printer. It also does not have any future plan.

In Rajasthan, academic libraries have emerged late to computerize their library operations. It is only after year 2000 that there is now some activity. It is not that there is a pressure from faculty and students, but because of UGC's financial assistance in acquiring systems and SOUL software as well as availability of training facility at the INFLIBNET's headquarter. In this connection, Government of Rajasthan has awakened now and has sought the support of INFLIBNET during CALIBER-2002 held at Jaipur in February 2002 to begin library automation in college libraries. This conference was sponsored jointly by INFLIBNET, Rajasthan University and the Directorate of College Education, Government of Rajasthan. However, INFLIBNET in its Annual Report of 2001-2002 has not mentioned their discussion which it had with Government of Rajasthan.

#### 1. AVAILABILITY OF READING MATERIAL IN UNIVERSITY LIBRARIES

The following table shows that the Rajasthan University Library (RUJ) is the largest university library in Rajasthan. If number of current journals is any indication of richness of academic libraries, it is RU, BITS and BVB which are subscribing to more than 500 current journals.

# Table -1: Reading Material in Libraries

S. No	Universities	No. of Books	No. of Current Journals	Back Vols.	Dissertations	Audio & Video Cassettes, Microforms CD-ROM
1	BVB	136135	550	9129	515	1000
2	BITS	208319	538	80000	350	350
3	IITD	169940	850	88895		1000(VTRS)
						2261(Microforms)
4	JNVU	272601	156	4400	5200	
5	JVBI	42000	150	5000	50	
6	KOU	85911	159	1200	150	250
7	MDSU	35000	151	2000	425	
8	MNIT	120000	135			1029(VTRS)
						41 CD-ROMs
9	MLSU	98234	31	1259	1600	291
10	RAU	8321			2231	
11	RVU	56000	37	-	300	12
12	RUJ	363065	534	80000	22699	17443( Reports)

In order to find out what percentage of current journals are available in electronic media, it was found that except IITD (not a part of academic libraries of Rajasthan) has access to 1600 online journals. Rajasthan University Library has access to few online journals although it did not mention the number of journals. Recently INFLIBNET has allowed freely to access OCLC sites for a few weeks on experimental basis. Later INFLIBNET provided a proposal to access EBSCO site freely for three months. The feedback from users is

Application of Information Technology in University Libraries of Rajasthan: A Survey Report

yet to be received. There are problems in accessing the sites. One is that the availability of current (power) and one is proper functioning of INTERNET. Dial up connections hardly work and leased lines from BSNL equally work slow.

#### 2. FINANCIAL SUPPORT TO LIBRARY AUTOMATION

Out of ten, six respondents have reported that they received financial support for library automation from INFLIBNET. KOU says that it has received financial support from Distance Education Council for library automation while MNIT reports that, it is getting grants from Ministry of Human Resources Development. Rajasthan University Library received a big grant of Rs. 50 lakhs a few years back. IIT Delhi is funded by Ministry of Human Resources and Development. It has received the grant of Rs. 17 lakhs and 13 lakhs in the year 2001 and 2002 respectively. Rest of the respondents have been funded in different years by INFLIBNET. JNVU and RVU have been funded in the year1997-98 by INFLIBNET.

### 3. HARDWARE CONFIGURATION IN LIBRARIES

Generally, academic libraries have bought PENTIUM III system. Only IIT Delhi and MNIT Jaipur have PENTIUM IV. IIT Delhi is now discarding earlier processors of 286,386 and 486, and buying latest PENTIUMS. In. IITD there are 44 systems in the library followed by MNIT Jaipur, BITS Pilani which have got 18 and 22 systems respectively. Rajasthan University Library has 25 systems in the library, and Banasthali Vidyapith has 10 systems in the Library. In fact IIT Delhi is the most rich library as compared to other respondents. They have 12 laser printers and 18 UPS. Besides they have LAN, network, online, CDROM and CDNET facility which other academic libraries lack. Even BITS Pilani and MNIT Jaipur though technological universities stand nowhere to IIT Delhi in terms of hardware and other facilities. IIT Delhi is far ahead of academic libraries of Rajasthan.. Rajasthan Vidyapith has shown lackadaisical approach towards library automation.

## 4. USE OF APPLICATION SOFTWARE

All academic libraries have Window based operating system. However BITS Pilani says it has UNIX system with LINUX. IIT Delhi, MNIT Jaipur and RUJ Jaipur also have a facility of UNIX system. Regarding use of software, BITS, IITD, MNIT and RUJ are using commercial software LIBSYS while BVB, JVBI, JNVU, MLSU are using SOUL software of INFLIBNET. KOU is yet to decide about library software. Few universities (JVBI, RVU and KOU) have not revealed the year in which they initiated library automation. However KOU is in better position as it has got a new library building, and a budget for library automation. Moreover the librarian is equally aware of library automation and knows what is required for it.

## 5. STATUS OF IN-HOUSE DATABASE PREPARATION

Respondents have been asked to disclose their database preparation of books, backvolumes, theses and dissertations, reports and other significant collection of libraries. Banasthali Vidyapith has created a house database preparation of more than 50,000 books of English language, while BITS for 80,000 books, Mohanlal Sukhadia University for 98,234 books, MNIT for 25,000 books and Rajasthan University Library for 7200 books. JVBI, KOU, RVU and MDSU have yet to begin database preparation. MLSU has prepared its database in Foxpro language. The database includes 5500 theses and dissertations. Thus pace of database preparation in universities of Rajasthan is too slow to be noticed except BITS Pilani. The problem of slow pace is because of the following reasons.

- 1. Lack of enthusiasm among libraries and pressure from academic users (postgraduates, research scholars and faculty).
- 2. SOUL software is yet to be fully operational and it is not multilingual software. Roughly 35% of library collection is in Hindi language which remain unattended. Moreover the software does not respond properly once database records of libraries become bulky.

#### 6. USER SERVICES

It is equally important to know whether application software is helpful in providing users services like providing access to OPAC, documentation, current awareness service and Selective Dissemination of Information. So far access to OPAC is concerned the libraries do provide the facility, but provision for SDI and for indexing is hardly seen. Since database preparation in itself is a big task, other services from application software are yet to be exploited. MNIT and RUJ provide viewing of CD-ROM

databases of secondary sources. IIT Delhi and BITS Pilani provide current awareness and selective dissemination services to its users.

#### 7. HOUSEKEEPING OPERATIONS

Six university libraries of Rajasthan use SOUL application software for cataloguing. But using it for acquisition purpose is still in experimental stage. Acquisition, Serials and Circulation module are yet to be helpful as users encounter many difficulties in modules. The problems are such which are difficult to be explained unless the people who have prepared the software are around. Presently when these problems were explained to INFLIBNET, they say that an updated version of SOUL software (which they are going to give) will not have these problems. It is hoped that INFLIBNET provides a new version and extends full support to those who are using SOUL software at an early date. Comparatively it seems that those who are using commercial software have less problem, but its users are also not fully satisfied. Besides housekeeping operations, computer systems are used for library administration. Computers are used for the letters, statistics, charts; guides, labels making etc.

Needless to write that all-responding libraries have basic infrastructure facilities like photocopying and other audio visual services. Few libraries report that they have microfilm reader, but none have a microfilming unit. If we look at the availability of computerized services like automated translation, multimedia, e-mail, fax, teleconferencing, LAN online searching, CDROM searching, technical communication etc, we find that IITD and BITS and MNIT are better equipped than other university libraries. RUJ, BVB and KOU are moderately equipped. Rest of the Universities will have to improve facilities. RVU and JVBI did not fill in relevant information shows that they have not yet begin library automation.

#### 8. NETWORKING ACCESSIBILITY OF LIBRARIES

MNIT, IITD and MLSU claim that they have access to national and international networks. Almost all the universities have access to INFLIBNET and INTERNET.IIT Delhi and MNIT have access to DELNET. None has got accessibility to international networks like DIALOG, JANET, BIOSIS, Chemical Abstract. IIT Delhi ofcourse has network facility with Physical Abstract, while MNIT has network facility of NICNET. As regards to CD-ROM search facility, only BITS, IITD, MNIT and RUJ provide to users.

# 9. PROBLEMS IN COMPUTERIZATION AND NETWORKING

Responding libraries have their own individual problems. BVB says that lack of knowledge in IT, SOUL's limitation as it is still in infancy stage and a need of Information Scientist and Technical Assistant are main problems. BITS says that they are using LYBSIS and if any problem persists they will call LYBSIS expert. IITD says they have no problem. KOU is yet to begin library automation. MDSU and RUJ have more problems with their university management. MNIT says that they do not have technical manpower as well as financial support. MLSU says that they do not get regular power supply. RUJ also mentions lack of training to library staff, lack of post of Information Scientist and Librarian are main problems.

## 10. FUTURE PLANS AND PROPOSALS TO COMPUTERIZATION AND NETWORKING

Responding libraries have expressed their future plans according to their needs. BVB wants to digitalize rare documents and provide computerized SDI services and full text search through INFLIBNET. BITS aims to make the library fully computerized. IIT Delhi wants to replace terminals with clients or SunRays. KOU wants to use appropriate library software and then connect them to Regional Centres and Study Centres in Rajasthan and link with national networks like DELNET, INFLIBNET, NICNET and OPNET. MDSU does not look enthusiastic in proposing future plans. MNIT hopes to complete of library automation, bar coding, digitalization etc. MLSU has plans to submit a project of Rs. 12 lakhs to the university. RUJ wants to offer full OPAC, CAS and SDI to users in near feature

#### 12. ASSESSMENT OF COMPUTER APPLICATIONS AND NETWORKING

Respondents were asked to provide free and frank opinion of Success and failure. BVB feels satisfied with creating a database of more than 50,000 documents, which can be accessed on OPAC, as well as through local area networking by other libraries of the campus. BITS says that it will come to know of failure and success when the present task of database preparation is over. IIT Delhi is quite satisfied with the progress of the library automation. The library database is accessible over Intranet and Internet. MNIT expressed concern for lack of technical manpower. MLSU is very satisfied with feeding of bibliographical records of 98,234 books. This record is searchable. The library further claims to have mounted its bibliographical records on DELNET and INFLIBNET.

## 13. MEASUREMENT OF SATISFACTION REGARDING AUTOMATION OF INFORMATION SYSTEM

BVB and IIT Delhi say that they are satisfied with the speed of library automation. BVB claims to finish the job of database preparation within a year. If there is any delay, partly INFLIBNET is responsible as they failed to provide multilingual software without which books of Hindi language script are not covered for database preparation. As regards to flexibility of automation system, BVB, BITS, IIT Delhi expressed "satisfied". MNIT, MLSU and RUJ expressed their satisfaction is just an 'average.' About "user friendliness of automation system" BVB, BITS, IITD, MNIT and RUJ have expressed "satisfied" while MLSU expressed only "average". Regarding "after-sales- service from the system" respondents have not been happy with it. Majority of respondents has expressed their satisfaction, as "average". RUJ is not satisfied with "after -sales -service" from the commercial software company service. It could be concluded that after - sales -service of any software has been poor irrespective of the fact whether it is a commercial or prepared by an academic body like INFLIBNET.

#### 14. CONCLUSION

The above survey study reveals that the universities are interested in library automation, and are ready to participate in resource sharing at state and national level. Moreover history of library automation is not old. There are many reasons for slow speed of library automation which have been stated in the above paragraphs.

At present INFLIBNET looks unequipped to attend to library automation problems of SOUL users. It has been already mentioned above that the after-sales -service of software supplier is extremely bad. INFLIBNET must attend to this grievance to SOUL users. Moreover future positions be filled with computer handling proficiency as well as UGC sanction one post each of Information Scientist and Technical Assistant. If this does not happen in near future, perhaps library automation will not further as fast as it should go.

#### REFERENCES

[1.] Rajyalaksmi "Impact of Technologies on Communication - and Information Networks. Indian. Scenario. In Library Movement and Library Development in India. Editor: C.P. Vashisth (Delhi, Indian Library Association, 1994) p. 29.

[2.] SOUL User Manual. p 32.

# **BRIEF BIOGRAPHY OF AUTHOR**



Dr. S. D. Vyas is a University Librarian of Banasthali Vidyapith, Rajasthan. He received his professional education from University of Delhi in 1967. Received Ph. D. from University of Rajasthan in 1989. He has contributed 50 papers and 12 books. He has attended more than 100 national and international seminars..