



Mapping satisfaction Level of Librarians of Engineering Institutions towards E-resources – a survey

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Abstract

This paper conducts a preliminary study of e-resources & consortia. Gives brief description of engineering education in Madhya Pradesh. Reviews few articles. Provides basic and essential information on institutions, types, infrastructure available and services. Analyses satisfaction level of librarians. Concludes that most of the librarians are satisfied with coverage & cost of e-resources in INDEST (now e-Shodh Sindhu). They are also satisfied with IT infrastructure available in their libraries. Only lacuna seems to be organization of orientation training programs on regular basis to promote use of e-resources.

Keywords: E-resources, Engineering education, e-Shodh Sindhu, Indest

1 Introduction

E-resources are made up of two words. Here word “e” stands for electronic. It is related to activities or processes mediated or enable through the use of the computers, frequently by means of telecommunication links. The word “resources” is usually used in plural for sources of supply or support, natural source of wealth or revenue from which a benefit is produced. Typically resources are material, energy, service, knowledge or assets, etc. Resources of any institution are basic or raw material. For an iron industry, iron a resource. Similarly for a library, information is a resource which may be in the form of manuscripts or books or

journals in printed form & any other media that contain information. The technology has metamorphosed the resources of libraries. Earlier printed journals & books have been mutated in electronic form in tapes (earlier stage) CD, DVD, Blue Rays (second stage) & then in hard disks of computers & supercomputers, etc. The later now can be accessed at a remote place due to development of high speed data transmission by the use of various wireless technologies. This is called “On line”. This has been possible due to advanced internet technologies at lower rates. Consortia based subscription to e-resources make subscription of e-resources cheaper.

For the first time the concept of agglomerated subscription of e-resources was discussed and recommended in a “National Seminar on Knowledge in Engineering & Technology Education and Research” at Indian Institute of Technology, Delhi in the year 2000. The recommendations were materialized by establishing “Indian National Digital Library in Engineering Science and Technology (INDEST) Consortium in the year 2003. Its name was changed into INDEST-AICTE Consortium in the year 2005. INDEST later on became one of the components of newly form e-Shodh-Sindhu along with UGC –INFONET & N-LIST. e-Shodh Sindhu provides access to 15,000 core and peer-reviewed journals and databases of publishers and agglomerate’s world-wide. It provides services to universities and colleges approved by UGC under section 12(B) and 2(f).The paper studies librarians’ attitudes towards e-resources in a consortium e-Shodh-Sindhu (INDEST).

2 Engineering Education in Madhya Pradesh

Madhya Pradesh is the second largest state in the country by area situated in the heart of the country. The state has many reputed institutions like IIT, IIM, Indore, IISER, NIT & AIMS, Bhopal etc. Besides it has 2 central universities, 21 state universities, 3 deemed universities and 24 private universities.

Engineering education in Madhya Pradesh has mainly grown in last few decades. Earlier in M.P. has only 4 government & 3 governments aided engineering institutions/colleges as given in table 1.

Table 1
Government & Government aided engineering institutions in M.P (chronological).

S. N.	Established	Institution	Location	Specialization
1	1947	Jabalpur Engineering College	Jabalpur	Engineering
2	1952	Shri Govindram Seksaria Institute of Technology & Science	Indore	Engineering
3	1957	Madhav Institute of Technology and Science	Gwalior	Engineering

4	1960	Samrat Ashok Technological Institute	Vidisha	Engineering
5	1964	Rewa Engineering College *	Rewa	Engineering
6	1966	Ujjain Engineering College *	Ujjain	Engineering
7	1981	Indira Gandhi Engineering College	Sagar	Engineering

**Commonly known as Govt. Engineering Colleges*

There are many centrally funded engineering institutions in M.P. The names of centrally funded engineering institutions are given in the Table 2.

Table 2
Centrally funded engineering institutions in M.P (chronological)

S. N	Established	Institutions	Location	Specialization
1	1960	Maulana Azad National Institute of Technology	Bhopal	Technical
2	1960	National Institute of Technical Teacher Training & Research	Bhopal	Technical
4	1997	Atal Bihari Vajpayee – Indian Institute of Information Technology	Gwalior.	Information Technology
5	2005	Pandit Dwarka Prasad Mishra Indian Institute of Information, Technology, Design and Manufacturing	Jabalpur	Information Technology
6	2009	Indian Institute of Technology	Indore	Technical
7	2017	Indian Institute of Information Technology	Bhopal	Information Technology

A long list of other engineering colleges is not included in this paper.

3 Literature Review

The paper has reviewed some studies made on e-resources & consortia. Toyo, (2017) studies use of e-resources in Delta State University, Nigeria. Recommends organizing seminars/workshops and awareness campaigns etc. Singh, (2017) introduces the e-Shodh Sindhu consortium, its membership, scope, aims and objectives. Provides list of e-journals, e-



books and their websites. Also provides lists of e-databases. Also suggests for inclusion of all institutions of higher education under its umbrella, organization of user orientation programs, enhancement of infrastructure facilities and organization of workshop, etc. Lingaiah, V. (2016) studies utilization of e-Shodh Sindhu resources by research scholars and faculty members in Jawaharlal Nehru Technological, University, Hyderabad. Suggests workshop/training programs and ICT facilities with better bandwidth. Suman and Sharma, (2016) examines the utilization of e-resources under consortium in Mahatma Gandhi Central Library of Indian Institute of Technology, Roorkee. Suggests orientation/training programs, evaluation of consortium periodically and organize workshop. Mishra, and Ramesh, (2016) define library consortia, provide various library consortia initiatives in India in brief & suggest a model for National Consortium of Indian Libraries (NCIL). Harish and Nikam, (2015) examine the opinion of 411 faculty members of 7 IITs towards e-resources under consortium, calculate mean & standard deviations for core purpose & augmented purpose, basic advantages, disadvantages, importance, reading pattern and satisfaction of using consortium. Find that faculty has positive attitudes about the use of consortium and they are satisfied by using e-resources them to fulfill their academic needs. Choudhury (2015) conducts a survey on the utilization of e-resources by students and teachers of four government and 2 private engineering institutions of Assam. Finds that maximum students and teachers know e-resources but do not know consortium. Users faced problems to find relevant information. Suggests development infrastructure, orientation programs separate library web page etc. Kumar, (2012) studies utilization of e-resources under consortium by faculty and students at Punjab University. Finds out that 86.66% user are aware. Problems such as need of more terminals, lack of internet bandwidth and insufficient time for use are also discussed.

4 Objectives

The study aims to map

- (i) Satisfaction level of librarians with the infrastructure
- (ii) The services of the libraries
- (iii) e -resources of the library
- (iv) Usefulness of the consortium based e-resources and
- (v) Economy of consortium based e-resources.

5 Methodology

In this preliminary survey 6 libraries which are subscribing e-resources through consortia (INDEST now e-Shodh Sindhu) have been selected. Libraries who are not member of this consortium have been omitted. For this collection of primary data personal interviews & schedules have been administrated. The secondary data and information have been collected from websites of the institutes & through documents made available during personal visits.

6 Data Collection and Analysis

Data collection is based on opinions received from librarians. These are reflected in following tables:

a. Name of institutions

Table 3 shows institutions selected in this study. There are 3 central government institutions, 1 state government and 2 state government-aided autonomous institutions situated at various places in Bhopal and Indore divisions (revenue) of Madhya Pradesh.

Table 3
Name of institutions

S.N.	Name of Institutes with abbreviation
1	Maulana Azad National Institute of Technology(MANIT), Bhopal
2	National Institute of Technical Teachers Training & Research(NITTT&R), Bhopal
3	Samrat Ashok Technological Institute(SATI), Bhopal
4	University Institute of Technology(UTI), RGPV, Bhopal
5	Indian Institute of Technology(IIT), Simrol (Indore)
6	Shri Govindram Seksaria Institute of Technology and Science(SGSITS),Indore

b. Library personnel (Professionals)

Table 4 shows number of professional staff and their qualifications in these institutions. Two libraries are headed by deputy librarian & assistant librarian. SATI has a librarian with NET qualification. Librarian of NITTT&R & deputy librarian of IIT are only MLISc. MANIT is headed by assistant librarian with NET qualification. UTI has both librarian & deputy librarian with Ph. D. degree.

Table 4
Library personnel (Professionals)

S.N.	Name of the Institution	Librarian Qualifications	Deputy librarian Qualifications	Assistant librarian Qualifications	Total Staff Strength
1	MANIT	-	-	M.Lib, NET & PGDCA	-
2	NITTT&R	M.Lib. & PGDCA	-	M.Lib. & PGDCA	02

3	SATI	M.Lib, NET& PGDCA	-	-	01
4	UTI,RGPV	M.Lib & Ph.D	M.Lib, Ph.D	M.Lib.	01
5	IIT	--	M.Lib	M.Lib,	
6	SGSITS	P.G., M.Lib.,Ph.D. & PGDCA	-	P.G. & M.Lib.,	01

c. Information Technology Infrastructure available

Table 6 shows that all 6 libraries have various IT related appliances such as servers, client, modem/switches, printers, scanners, barcode printers, barcode scanners and photocopying machines. Except SATI library other 5 libraries also have LCD projectors and web cameras+ CCTVs. Their number varies in their libraries as shown in the table.

Table 6
Information technology infrastructures available

S. N.	Name of the Institutions	Server	Client	Modem/ switches	Printer	Scanner	Barcode printer	Barcode scanners	LCD projectors	Web camera+ CCTV	Photocopy machine	Any others
1	MANIT	√	50	√	20	10	07	03	√	√	01	√
2	NITTT&R	1	√	√	2	1	1	1	√	√	2	√
3	SATI	1	10	√	3	1	1	5	-	-	1	-
4	UTI,RGPV	4	180	15	1	2	2	4	1	13	2	RFI D
5	IIT	1	25	√	4	2	1	2	√	√	√	-
6	SGSITS	3	63	3	4	3	1	5	√	1+12=13	1	-

(√= shows availability but number not provided)

d. Services offered

Table 7 shows all 6 libraries providing various library services such as reference service, photocopying/printing service and inter library loan, etc. Except libraries of MANIT &

NITTT&R other 4 libraries also provide current awareness services. Except MANIT, NITTT&R and SATI libraries other 3 libraries provide selective dissemination services. SATI and UTI libraries also provide content page service while MANIT and UTI libraries compile bibliographies. Except NITTT&R library other 5 libraries provide user education.

Table 7
Services offered

S.N.	Name of the Institutions	Reference service	Current Awareness Service	Selective Dissemination service	Content page service	Photocopying/Printing services	Inter Library Loan	Compilation of bibliographies	User education	Any other
1	MANIT	√	×	×	×	√	√	√	√	√
2	NITTT&R	√	×	×	×	√	√	×	×	×
3	SATI	√	√	×	√	√	√	×	√	√
4	UTI,RGPV	√	√	√	√	√	√	√	√	√
5	IIT	√	√	×	×	√	√	×	√	×
6	SGSITS	√	√	√	×	√	√	×	√	√

e. Methods used for promotion of e-resources

Libraries promote use of e-resources by various methods. Except libraries of MANIT & IIT other 4 libraries provide library home page & e-mail services for promotion of e-resources. Except libraries of MANIT & NITTT&R other 4 libraries conduct orientation programs for e-resources. Except libraries of NITTT&R & SATI other 4 libraries provide guides & tutorials for it. Except libraries of UTI & IIT other 4 libraries provide poster/notice board services to promote use of e-resources. This is given in table 8.

Table 8
Methods used for promotion of e-resources

S.N.	Name of the Institutions	Library home page	Orientation programs	E-mail	Guide & Tutorials	Poster/Notice	Others
1	MANIT	×	×	×	√	√	-
2	NITTT&R	√	×	√	×	√	×
3	SATI	√	√	√	×	√	√
4	UTI,RGPV	√	√	√	√	×	√
5	IIT	×	√	×	√	×	×

6	SGSITS	√	√	√	√	√	-
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Thus it can be observed that the libraries have developed infrastructure required to promote use of e-resources.

7 Opinions of librarians

In this section opinions of librarians have been analysed. The study is based on their satisfaction with the infrastructure & opinions about e-resources.

a. Infrastructure

Table 9 shows that all the 6 librarians are of the opinion that they have 'very sufficient' infrastructure to provide various services.

Table 9
Satisfaction with Infrastructure

S.N.	Name of the Institution	Very sufficient	Just sufficient	Less sufficient
1	MANIT	√	-	-
2	NITTT&R	√	-	-
3	SATI	√	-	-
4	UTI,RGPV	√	-	-
5	IIT	√	-	-
6	SGSITS	√	-	-

b. Satisfaction with Library Services

Table 10 shows that the librarians of NITTT&R, UTI and IIT are very satisfied with their library services while librarians of MANIT, SATI and SGSITS are satisfied only. No librarian is dissatisfied.

Table 10
Satisfaction with library services

S. N .	Name of the Institutions	Very satisfactory	Satisfactory	Just satisfactory	Not satisfactory	dissatisfactory
1	MANIT	-	√	-	-	-
2	NITTT&R	√	-	-	-	-
3	SATI	-	√	-	-	-
4	UTI,RGPV	√	-	-	-	-
5	IIT	√	-	-	-	-
6	SGSITS	-	√	-	-	-

7.3 Satisfaction with e- resources

Table 11 shows that the librarians of UTI& IIT are of the opinion that the students & teachers are “highly satisfied” with e-resources while in MANIT, NITTT&R, SATI and SGSITS students & teachers are “satisfied only”. No librarian is dissatisfied in this respect.

Table 11
Satisfaction with Electronic Resources

S.N.	Name of the Institution	Highly satisfied	Satisfied	Just satisfied	Not satisfied	Very unsatisfied
1	MANIT	Students	-	√	-	-
		Teachers	-	√	-	-
2	NITTT&R	Students	-	√	-	-
		Teachers	-	√	-	-
3	SATI	Students	-	√	-	-
		Teachers	-	√	-	-
4	UTI,RGPV	Students	√	-	-	-
		Teachers	√	-	-	-
5	IIT	Students	√	-	-	-
		Teachers	√	-	-	-
6	SGSITS	Students	-	√	-	-

		Teachers	-	√	-	-	-
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7.4 Usefulness of e-resources

According to 4 librarians of MANIT, UTI, IIT and SGSITS e-resources are “very good”. Librarian of NITTT&R feels that they are excellent. Librarian of SATI feels them “good”. No one has responded as poor or very poor.

Table 12
Usefulness of Consortium to Students

S.N.	Name of the Institution	Excellent	Very good	Good	Poor	Very poor
1	MANIT	-	√	-	-	-
2	NITTT&R	√	-	-	-	-
3	SATI	-	-	√	-	-
4	UTI,RGPV	-	√	-	-	-
5	IIT	-	√	-	-	-
6	SGSITS	-	√	-	-	-

7.5 Economy of e-resources

Table 13 shows that librarians of NITTT&R and UTI feel that e-resources in consortium are “little costly” while librarians of IIT & SGSITS feel they are “cheaper”. Librarian of UTI feels them “very cheap” and librarian of MANIT feels them “a lot cheap”. No one finds them more costly.

Table13
Economy of Consortium

S.N.	Name of the Institution	More costly	Little costly	Cheaper	Very Cheap	Lot Cheap
1	MANIT	-	-	-	-	√
2	NITTT&R	-	√	-	-	-
3	SATI	-	-	-	-	-
4	UTI,RGPV	-	√	-	√	-
5	IIT	-	-	√	-	-
6	SGSITS	-	-	√	-	-



8 Suggestions and Recommendations

On the basis of the opinions received, following points are made:

- (i) Librarians should convert the non-users into active users by orientation programs;
- (ii) Librarians should conduct training programs, workshops, audio-visual presentations,
 - a. demonstrations, etc., on regular basis to increase use of e-resources ;
- (iii) Librarians should take a leading role to create awareness among users about
 - a. e-resources in a consortium, and
- (iv) The infrastructure facilities should be enhanced for better utilization of available
 - a. e-resources.

9 Conclusion

With the above study it can be concluded that librarians find e-resources as a boon for their services. Most of them are satisfied with coverage & cost of e-resources in INDEST (now e-Shodh Sindhu). They are also satisfied with IT infrastructure available in their libraries. Only lacuna seems to be organization of orientation training programs on regular basis to promote use of e-resources. More is the use of e-resources more is the return on investment on e-resources in a consortium.

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