Resource Sharing and Networking of Engineering College Libraries

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Abstract

The present paper discusses various factors motivating Engineering Colleges for implementing resource sharing, important objectives and areas of resource sharing. It further highlights important success stories, impact and the role of Engineering College Libraries. Various considerations for networking for Engineering College Libraries and major potential problems for resource sharing are also discussed.

1. Background

Libraries are the central support services of Engineering Colleges. Libraries provide support to Engineering Colleges fo achieving the goals and vision of respective Engineering Colleges through ensuring quality based libraries and information support services to the students, faculty, staff and industries. Librarians are professionally committed to update the collections continuously in order to reinforce and enrich the knowledge base for assisting the stakeholders of Engineering Colleges to achieve excellance in academic, research, development, consultancy, continuing engineering education and interaction with external environment. With the passage of time, the quantum and quality of users and their

expectations have also drastically changed. Besides this major factor, there are various other factors which motivate Engineering Colleges to share their available resources within respective institutional framework. Some of them are listed below:

1. Shrinking fiscal resources
2. Price-hike in S&T journals
3. Information is treated as the factor of production
4. Publications explosion in the area of science, engineering & technology
5. Avoiding duplication of information resources
6. R&D information needs
7. Providing enhanced coverage of information resources and services
8. Meeting potential information needs of faculty, students and staff
9. Generation of satisfaction among users
10. Recent trends and developments in the area communication, computer and information technology
11. Optimum utilisation of resources
12. Emerging trends in librarianship principles and practices
13. Self sufficiency

2. Objectives of Resource Sharing

On the basis of experience and involvement in resource sharing activities in the area of science, technology and engineering, it can be visualised that Engineering Colleges can have the following objectives for their resource sharing initiatives:

1. To provide better services
2. To provide more coverage of collections and facilities
3. To avoide duplication
4. To share experiences
5. To face financial crunch
6. To promote interaction
7. To provide wider access to users
8. To provide high quality library and information support services

3. Levels of Resource Sharing

It is further suggested that Engineering Colleges can work out a suitable

and sustainable strategy to implement resource sharing plan at different levels in phased manner so that the activity is properly coordinated and implemented to achieve set objectives. It is suggested that the resource sharing can be implemented at different levels. Some of them are given below:

1 Local
2 Regional
3 National
4 International

4. Areas of Resource Sharing

Keeping in view the need of stake holders of Engineering Colleges as well as the potential information needs of the users of library & information support services provided by Engineering Colleges. It is essentially needed to identify the various areas for resource sharing activities so that Engineering Colleges ma anagement as well as users are able to enjoy the fruits of resource sharing equitably. The following areas for reseource sharing are identified which may certainly be useful for Engineering Colleges environment:

1 Collections Building
2 Inter-library loan
3 Reference Services
4 Membership
5 Contents Page Service
6 Centralised Processing
7 Human Resources
8 Expertise & Facilities
9 Data base Creation
10 Union Catalogue
11 Training
12 Software

5. Success Stories

It is known fact that before implementing new schemes or projects, it is always desirable to know and learn from the past for improving the existing as

well as to face potential problems successfully. In this connection, it is necessary that Engineering Colleges take a note of the developments and trends in the area of resource sharing which have already been implemented by respective engineering organisations in India. In this direction, the efforts of IITs for resource sharing are discussed below.

5.1 Major Initiatives at IITs

The factors listed as above and the goals of respective institutes altogether motivated IITs for sharing their resources. Consequently, IIT Delhi took a lead in organising a group discussion of the librarians of all IITs on 23rd March, 1986 to discuss resource sharing so as to make use of each others resources effectively and efficiently. Next to this, during 1988, IIT Kanpur organised resource sharing meeting of all librarians as well as the concerned faculty involved in the library automation projects at respective institutes with the objective to discuss the various practical problems and issues to implement resource sharing among IITs. Similarly, IIT Bombay took lead to organise resource sharing meetings of all librarians of IITs, Tata Institute of Fundamental Research, and Bhaba Atomic Research Centre during 1995 and 1998. Consequently, all librarians agreed to finalise an agreement of co-operation containing the following major decisions:

1 Consortium of libraries was conceived under which participating libraries will share resources through efficient inter library loan system. The consortium will explore the possibilities of availing the facilities extended by the publishers in susbcribing periodicals in multiple copies in print as well as electronic media.

2 Each participating library will function as a provider library for a set of

periodicals and thus be committed to maintain the subscription of these titles and will not delete any title without seeking the approval of the consortium.

3   Each library will prepare a union catalogue of periodicals holding available in their library and make it available to the participating libraries.

4   All participating libraries will maintain the collection of photocopies of articles received under the resource sharing agreement to meet repeated/multiple requirements and to avoid the duplicate requests.

5   All participating libraries will open an e-mail account to deliver on-line doucment delivery service on priority

Further to these initiatives, IIT Kharagpur also organised resource sharing meeting on 2nd and 3rd September, 1999. The librarians reviewed the progress of the subscription of current journals on consortium basis. Other issues discussed were mainly the preparation of union catalogue for 2000, infrastructure and man power requirement, database creation of periodical holdings of all IITs and BARC, exchange visit of staff. The work regarding agreed activities like databse creation of periodical holdings is in progress which is being undertaken at IIT Madras. In this direction, recently, IIT Madras has completed the project to compile the Catalogue of Periodicals containing the holdings of the periodicals subscribed by the Central Library of IIT Madras since inception. The Catalogue of Periodicals was formally released by Prof. M.S. Ananth, Director of IIT Madras on 08-02-2002 and sent to all IITs. IIT Kharagpur recently, organised resource sharing meeting focussing on the digital initiatives undertaken at each institute on the eve of National Conference on Information Management in Electronics Libraries during 26th - 27th February 2002.

5.2 MHRD Consortia

IITs are involved to discuss and debate about resource sharing implementation since 80's. . Recently, to give the practical shape of resource sharing discussions Ministry of Human Resource Development has constituted a MHRD Consortia with Expert Group comprising the representatives from IITs / IISc / RECs. In this direction, the first meeting of Experts Group was held on 19th July, 2002 in New Delhi followed by another meeting on 10th September, 2002 in Bangalore. Various presentations were invited from publishers to present their electronic databases as well as e-journals products. It is brought to the kind notice that consortia with collective bargaining has successfully brought down the cost of e-Journals and e-databases. The following e-databases are proposed to be available for access to IITs / IISc with effect from January 1, 2003.

1. EIL Online
2. Science Direct and Ideal
3. Springer Verlag
4. ABI /INFORM
5. ACM Digital Library
6. COMPENDEX+ and INSPEC
7. Web of Science
8. SciFinder Scholar
9. MathSciNet
10. JCCC
11. JGATE

5.3 MALIBNET Consultation Cards

IIT Madras is actively involved in the Madras Library Network activities . Being founder member of MALIBNET, we have the consultation card facility which is successfully utilised by our users who use these cards to consult the facilities and resources available in local and nearby libraries.

We have 12 consultation cards which are rotated on priority among users. This facility has generated satisfaction among our users and removed administrative barriers between users and staff . Presently, 25 member institutions are using the MALIBNET Card service

5.4 Document Delievery

We have opened a DDS email account which is exclusively used by IITs to satisfy the document delivery requirements pertaining to the journal articles which are not availbale in the respective IITs. For this purpose, IIT Madras has created special web enabled DDS form on the library website http://www.cenlib.iitm.ac.in

5.5 Borrowing Facilities Arrangement

We have made arrangements for borrowing facilities to our students from local institutions like Anna University, IGCAR, British Council, USIS libraries.

5.6 Union Catalogue of Periodicals

IITs have decided to prepare the union catalogue of current journals along with holdings. In this direction IIT Madras has prepared the holdings pertaining to the Central Library and the data structure for the bibliographic details ahas been sent to all IIT libraries. The work is in progress.

6. Major Core Areas for Resource Sharing
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Keeping in view the need and emerging thrust areas for Engineering Colleges, the following core areas for resource sharing are identified;

1   Union Catalogue

2   Collection Building Strategy
3   Exchange of Publications
4   Training of Staff
5   Exchange of Experience and Expertise
6   Document Delivery Service
7   Consultation Cards Facilities
8   Consortium Approach
9   Compilation of Staff Directory
10 Digital Reference Services
11 Data base Creation

7. Impact

The above discussions make it clear that resource sharing philosophy is very much useful to all educational institutions. The implementation of resource sharing will eliminate the feeling among the users that our institute is not having the required resource. Resource sharing arrangement will help the librarians to provide the document and information which is not available at the institution. We can visualise the following impact of resource sharing on the libraries of Engineering Colleges.

1   Users Satisfaction
2   Coverage of Collections
3   Time Saving
4   Space Saving
5   Library Image
6   Efficiency

8. Role of College Libraries

It is necessary that College Libraries need to focus on the creation of professional services to meet the potential information needs keeping in view the following major objectives:

1   Providing Webbased Library and Information Services
2   Bridging the Knowledge Gap
3   Achieving Excellence in Services
4   Ensuring Users Satisfaction
5   Formulation of Consortia based E-Collections Building Strategy

6   Providing Dynamic links to Information Resources
7   Globalised Reach
8   Distance Education Application
9   Digital Library Initiatives

9. Networking of College Libraries

There is an urgent need to have networking of Engineering Colleges which will also translate the concept of resource sharing into reality for libraries. The following factors can be taken into consideration to implement networking among Engineering Colleges:

1   Creation of environment for networking in Engineering Colleges
2   Identification of priorities areas
3   Craetion of IT infrastructure for libraries with Internet access
4   Providing training to library staff
5   Creating awareness among users about resources and services
6   Integrated and comprehensive website for the libraries
7   Formulation of working group
8   Study of resource sharing efforts at other institutions
9   Formulation of Consortia
10 Consultation Cards
11 Inter- library loan
12 Library software,
13 Preparation of union catalogue of journals, books, conference proceedings
14 Database creation of project reports and Faculty publication

10. Major Problems

It is a fact that the concept of resource sharing undoubtedly is very useful in recent environment in the area of science, technology & engineering.   The implementation of this concept needs careful, constant and concerted efforts on the part of educational institutions. On the basis of experience, the potential problems pertaining to the implementation of resource sharing in Engineering Colleges are listed below:.

1   Physical Isolation
2   Ego of Librarians

     3 Rigid Procedures
     4 Closed Policy
     5 Disinterest
     6 Low Priority
     7 Infrastructure

11. Conclusion

In view of the above discussions, it can be concluded that Resource Sharing is a great boon which needs to be implemented progressively and professionally in Engineering Colleges in India. This initiative will generate optimum satisfaction among users and also save considerable national resources.

List of Websites Referred

1. http://www.aicte.ernet.in/aicte/engg.htm

2. http://www.educationbangalore.com/pages/2list_10plus_eng-col.htm

3. http://www.cenlib.iitm.ac.in

State wise Listing of the Institutes					
		Degree Engineering		Diploma Engineering	
		No. of Institutes	Intake	No. of Institutes	Intake
Central	Madhya Pradesh	41	10380	58	9455
	Gujarat	23	7370	40	10375
East	Mizoram	01	120	03	390
	Sikkim	01	280	02	270
	Orissa	30	7000	27	5049
	West Bengal	32	7157	44	6075
	Tripura	01	160	01	125
	Meghalaya	01	180	02	190
	Arunachal Pradesh	01	210	01	180
	Andaman & Nicobar	--	--	02	170
	Assam	03	660	10	1318
	Manipur	01	150	03	215
	Nagaland	--	--	02	120
North	Bihar	12	3140	28	4798
	Uttar Pradesh	83	16896	112	12205
North West	Chandigarh	03	560	04	640
	Haryana	31	7445	31	5335
	Jammu & Kashmir	09	1360	14	3085
	New Delhi	11	2560	26	5077
	Punjab	20	4720	40	7415
	Rajasthan	23	5164	28	2973
	Himachal Pradesh	02	410	07	875
South	Andhra Pradesh	104	30150	92	16175
	Pondicherry	05	940	05	742
	Tamil Nadu	160	40491	213	45394
South West	Karnataka	88	30152	199	2864
	Kerala	56	7110	52	8430
West	Maharashtra	138	41315	169	37165
	Goa	02	404	08	1110
	Daman & Diu	--	--	01	90
	Grand Total	**838**	**232229**	**1224**	**188300**

Engineering Colleges in Bangalore

Government Colleges

- **University Visveswarya College of Engineering,** K R Circle, Bangalore 560 001

- **Sr. Krishnarajendra Silver Jubilee Technology Institute,** K R Circle, B'lore 1

Private Aided Colleges

- **B M S College of Engineering,** Bull Temple Road, Basavanagudi, Bangalore - 560 019

Private UN-Aided Colleges

- **Acharya Patasala Rural College of Engineering,** Somanahalli, Near Bangalore

- **AMC Engineering College,** Bannerghatta Road, Bangalore

- **B T L Institute of Technology & Management,** Bommasandra, Near Bangalore

- **Bangalore Institute of Technology,** Visveswarapura, K R Road, Bangalore - 560 004.

- **Dayananda Sagar College of Engg,** Shavige Malleshwara Hills, Kumaraswamy Layout, Bangalore - 78

- **Dr Ambedkar Institute of Technology,** Mallathally, (Near Jnana Bharati Campus) Bangalore - 560 056

- **East Point College of Engineering & Technology,** Bayappanahalli, Near Bangalore

- **Ghousia College of Engineering,** Ramanagara, Bangalore dist -571511 (Bangalore Rural)

- **H.K.B.K. College of Engineering,** 6/1, Cantonment Railway Station Road, Bangalore.

- **Islamia Institute of Technology,** Bannerghatta National Park Road , Bangalore - 560 076

- **J.S.S.Academy of Technical Education,** Jayanagar, Bangalore

- **K S Institute of Technology,** Raghuvanahally Near Bangalore

- **M S Ramaiah Institute of Technology,** Gokul Extn Bangalore - 560 054

- **M V Jayaraman College of Engineering,** Near Whitefield, Bangalore - 560 067

- **PES Institute of Technology,** 100 Feet Ring Road, Hoskerehalli, Banashankari III stage , Bangalore -85.

- **Rashtreeya Vidyalaya College of Engineering (R V College)** Mysore Road, Bangalore - 560 059

- **Revana Siddeshwara Institute of Technology,** Chokkanahally , Near Bangalore

- **Shirdi Sai Engineering College,** Magadi Main Road, Bedrahalli, Viswaneedam Bangalore - 560 091

- **Sir M Visweswaraiah Institute of Technology,**Hunasamaranahalli, Bettahalasur, Bangalore - 562 157

- **Sri. Belimatha Mahasamsthana Institute of Technology,**Nelamangala, Bangalore Sub-urb

- **Vemana Institute of Technology,**Marasur, Near Bangalore

- **Vivekananda Institute of Technology,**Kengeri, Bangalore Sub-urb