

46. A Study Of Resource Sharing Through Networking of Punjab State Engineering College Libraries

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1. Introduction

Information and publication revolution, declining library budgets, inflated prices of publications, increasing specializations, subject diversifications and growing user expectations have been forcing library professionals to think of library resource sharing through networking. According to United Nations Information Systems for Science and Technology (UNISIST), "Networking is a set of inter-related information systems associated with communication facilities, which are co-operating through more or less formal agreements and institutional agreements in order to jointly implement information handling operations with a view to pooling their resources and better serving to the users. They generally follow identical or compatible rules and procedures". From the above definition, it is clear that a network is a cooperative system of sharing resources among two or more libraries through a formal institutional agreement, a common pattern of exchange of information among libraries in a network is through the communication system. The networks are often called information network, electronic information network, library network etc.

At present there are various library networks which are functioning at local, regional, national and global level. But no such engineering college libraries network exists in Punjab State. So, there is a strong need for establishing a Punjab State Engineering College Libraries Network

2. Objectives of the Study

- To assess the existing resources available in engineering college libraries in the Punjab state.
- To design and recommend automation and networking among these libraries for the maximum utilization of available resources.

3. Methodology

This study is based on primary and secondary data. The primary data is collected from selected engineering institution libraries in Punjab State through questionnaire; personal visits these libraries and interviews with librarians/library in charges. Secondary data is collected from documents and the internet.

4. Limitation of this Study

The present study is based on only five engineering colleges established by Govt. of Punjab. The names of the colleges are:

- Beant College of Engineering & Technology (BCET), Gurdaspur.
- Giani Zail Singh College of Engineering & Technology (GZSCET), Bathinda.
- Malout Institute of Management & Information Technology (MIMIT), Malout.
- Shaheed Bhagat Singh College of Engineering & Technology (SBSCET), Ferozepur.
- Baba Hira Singh Bhattal College of Engineering and Technology (BHSBCET), Lahragaga.

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5. Major Findings

- None of the colleges have separate library buildings due to which they cannot expand their resources and services.
- It has been found that all engineering college libraries of Punjab individually may not be having enough collection but all the five engineering college libraries as a whole have substantial collection consisting of 73,008 books, bound periodicals, standards, manuals, projects reports, CDs and technical video cassettes, etc
- It has been found that 05 engineering college libraries of Punjab having resources of 288 foreign and Indian journals in their collection can provide excellent resource sharing among them.
- For maintaining economy in acquisition of publication especially in case of journals, a co-operative policy should be adopted, and duplication in subscription of journals should be avoided.
- It has been found that only two engineering colleges i.e. BCET, Gurdaspur and MIMIT, Malout have INDEST consortium of IEL on line iee / iee and Springer membership respectively while SBSCET, Ferozepur, BCET, Gurdaspur and MIMIT, Malout are the members of DELNET etc.
- One of the major problems faced by the librarians is that of inadequate library budget which has hampered the proper growth and development of library collection in this information age. Due to the continuous increase in subscription rates of foreign publications/periodicals and increase in conversion rate of foreign currency day by day, it has become very difficult to add an adequate number of books and renew all the periodical subscription without provision of additional grants. In view of the above, resource sharing and networking for promoting mutual library cooperation has been proposed to optimize the existing resources in the all engineering college of Punjab. Exchange of contents pages of periodicals through internet or e-mail, free access to library to consult source by members of the participating engineering colleges, have also been emphasised.
- It has been observed that only 03 colleges have Internet facility i.e. BCET, Gurdaspur, MIMIT, Malout and SBSCET, Ferozepur. The remaining 2 colleges do not have Internet facilities in their libraries.
- Common software should be selected looking with all futures implications and a copy of this software should be distributed to all the five engineering college libraries and trained library professionals to use the above gadgets.
- For better utilization of resources a computerized regional area network should be established by linking all these libraries.

6. Proposed Network

This study proposes a network of engineering colleges in the Punjab State. This network is a computer communication network of engineering college libraries, proposed to improve the capability of resource sharing and information access to the technical professionals in Punjab State. It is a cooperative network and will contribute to pooling, sharing and optimization of resources, facilities and services of technical institution libraries in the Punjab State. It also aims to develop a programme towards the modernization of these libraries.

7. Objectives of the Network

- To evolve a state-wide network of engineering college libraries for an optimum utilization of the information resources.
- To optimize the utilization of funds by minimizing duplication in all spheres.
- To provide access to document collection of all the engineering college libraries in the state.
- To improve the inter-library loan services among the engineering college libraries with smooth and

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- speedy exchange of the information telecommunication links.
- Standardization of the library services and activities.
- To facilitate inter-communication among the engineering college libraries in the state.
- To provide access to other national/ international networks.

8. Services of the Network

These objectives could be fulfilled by offering the following services:-

- Catalogue-based services.
- Database Services.
- Inter-library loan request processing, record keeping and document service (fax and non-fax).
- Acquisition.
- Serial controls.
- On-line database.

9. Hardware and Software

9.1 Computer Hardware Configuration for participant's libraries

Word Length:	64
Process Speed:	3 Gips
Memory (RAM):	128 MB
Disk Space:	80 GB
Terminal:	5-10
Laser Printer:	2
CD Writer:	1
Fax Card:	1
Telephone Line:	1
UPS:	5-10 or as per capacity
Router:	10 Mbps
Hub:	10 Mbps

9.2 Software

System Software	:	Window 98/XP/NT
Application Software	:	LIBYS/SOUL or Similar
Networking Software	:	LINUX

10. Network Architecture (Communication and Topology)

10.1 Communication

Punjab State Engineering College Libraries Network participants fall in the Wide Area Network, where the data transmission rate envisaged is 100 Kbps. The appropriate channels of communication could either be dedicated telephone lines or satellite links.

10.2 Topology

Distributed topology is recommended for the Punjab State Engineering College Libraries Network. However, topology for the Punjab State Engineering College Libraries Network must evolve because there

are several factors like funds, trained personnel, hardware, software and communication facilities that continually influence their growth.

11. Grants

Budgetary requirements for the network will have to be worked out. Possibility for grants from AICTE (All India Council for Technical Education) or NISSAT (National Information System of Science and Technology) for the operation would be explored. Similarly the Govt. of Punjab could also be approached to allocate funds to the Institutions participating in the network.

12. Governance

It is suggested that the Punjab State Engineering College Libraries Network may be instituted in the Department of Technical and Industrial Training, Govt. of Punjab. A project committee may be set up consisting of members from the Punjab Technical University, Jalandhar; Punjabi University, Patiala; Guru Nanak Dev University, Amritsar; N.I.T., Jalandhar, Thapar Institute of Engineering and Technology, Patiala and A.I.C.T.E., New Delhi. An advisory board consisting of heads/representatives of the participating institutions may be established to advice the project committee.

13 Implementation of Plan

Considering the existing infrastructural facilities, financial resources, manpower and technological aspects, the implementation of the model can be made in three successive phases. The phase wise implementation tasks to be undertaken are as follows:

Ist Phase

1. Introduction of computer culture in the engineering college libraries.
2. Setting up of communication infrastructure.
3. Creation of machine-readable catalogue, like CCF.
4. Automation of engineering college libraries.
5. Providing training for the existing staff.

IInd Phase

1. Setting up of the network and linking the participating libraries.
2. Introduction of various user services through the network.

IIIrd Phase

1. Bringing all the other Punjab State technical Institution libraries into this network.
2. Join hands with other local, regional, national and international networks.

14. Conclusion

The problem entailing from information explosion, declining library budgets, inflated prices of publications, user expectation etc. have necessitated active cooperation in the field of library and information services. Automation and networking can be an effective solution for better access to knowledge and information. The proposed plan will enable the library professional of the state to speed up the application of modern techniques in the libraries for the effective cooperation and resource sharing.

References

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