Networking of Academic Libraries in Guwahati: A Study

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In the present knowledge or information society, whatever we may call it, is dominated by the largest global network offered by Internet technology. Networking is the pre-requisite of the present society to be member of it. Therefore, to become the member of the library, network has become essential without any scope for any option or alternatives. Inadequacy of resources of even biggest library of the world is the main feature of any library or resource center. Therefore, augmentation of resources at the minimum cost is the aim not only by adding own resources but use resources of other libraries. The present professional challenge is that resources may not be available in own collection, but are to be made accessible wherever these are available. As such dependence on external resources is increasing day by day. We have to borrow what we don't have or develop a common repository by collective efforts, which requires not only willingness to begin the process but mission to achieve the objectives. Keeping in view the above points in mind this paper briefly discuss about the need of the Guwahati academic library network and objectives of networking among the academic libraries in the Guwahati city. Further it enumerates issues involved in establishing such network, point out the constraints and finally the suggestion for the success of such networks.

Keywords: Academic Library, Information Communication Technology (ICT), Library Automation, Library Networking.

1. Introduction

No library or resource center of the world is self sufficient to meet the various information needs of the users. With the rapid growth of publications, knowledge explosion, shrinking resources, escalation of prices and ever increasing expectation of users compelled the library and information centers to go for networking for resource sharing. The most important goal of networking is to maximize the availability of resources and services at minimum expenses. Most of the academic libraries are struggling for continuation of current periodicals and purchase of new books. These academic institutions can cope with this problem only by networking and resource sharing.

Networking of library and information centers has been recognized as the de facto standard for better resource mobilization in the libraries. Advancement in computing technologies for standardization of

bibliographic resources has contributed the steady growth of bibliographic databases in the LICs. A networked system of libraries bears promises to achieve common benefits i.e. sharing of resources, designing better access routes to remote resources, by adopting the best standard for bibliographic databases.

Considerable progress has been made in the areas of library networking in India. Several local, metropolitan, regional and national level library networks have already been established in India for resource sharing. The main purpose of all these networks is to acquire reading materials collectively, avoid duplication, consortia approach for costly foreign journals and databases, maximum utilization of reading materials available in libraries of a particular locality or region by the users.

In last few decades the concept of library and information networks in India has been introduced and the LIS have started thinking about the resource sharing and consortia approach for acquisition and use of library resources either in print or electronic medium and other resources like manpower and equipments etc. In this direction Govt. of India has established NICNET and NISSAT, and CMC also established INDONET, which have introduced the concept of networking of organizations. Therefore professional's bodies like ILA, IASLIC have started promoting the benefits of library networks and concept of consortia approach for collection development and its utilizations by the academic communities.

2. Objectives of the Study

The study is conducted with the following objectives-

- ⮑ To study the academic libraries of Guwahati: The present scenario.
- ⮑ To find out the services offered by the respective academic libraries.
- ⮑ To find out the present status of automation of academic libraries in Guwahati.
- ⮑ To suggest a plan for introducing networking of academic libraries in Guwahati.

3. Scope

Since there are many academic libraries within Guwahati but I have selected some of the libraries among them. It includes some deficit and non-deficit colleges, technical colleges of Guwahati and the Gauhati University. In my dissertation I have discussed about the theoretical aspect of networking of these academic libraries in Guwahati.

3.1 Name of Library with Year of Establishment

Table 1– University and College libraries under the study

SI.No.	Name of Institution	Year of Establishment	Name of the Library
1.	Gauhati University	1948	Krishna Kanta Handiqui Library
2.	IIT, Guwahati	1994	Central Library, IIT
3.	Assam Engineering College	1955	Assam Engineering College Library
4.	Gauhati Medical College	1962	Central Library, GMC
5.	Cotton College	1901	Dr. Surya Kr. Bhuyan Library
6.	Handique Girl's College	1938	Handique Girl's College Library
7.	B. Baruah College	1943	Hem Barua Library
8.	Gauhati Commerce College	1962	Dr. Birinchi Kr. Baruah Library
9.	Pandu College	1962	Pandu College Library
10.	Lalit Chandra Bharali College	1971	L.C.B. College Library
11.	K.C. Das Commerce College	1983	K.C. Das Commerce College Library
12.	S.B. Deorah College	1984	S.B. Deorah College Library

4.   Data Analysis and Interpretations

Data gathered through questionnaire from the 12 libraries. Feedback was requested in a few vital parameters about the libraries relevant to the study and interpretations are carried out in the following tables.

4.1   Library Automation

Table 2 – Database management packages in the libraries

SI.No.	Library Name	Fully Automated	Partially Automated	Library Software
1.	GU Library		Yes	SOUL
2.	IIT Library	Yes		LIBSYS
3.	Assam Engineering College Library		Yes	SOUL
4.	GMC Library	Yes		KOHA, GSDL
5.	Cotton College Library	Yes		SOUL
6.	Handique Girl's College Library		Yes	SOUL
7.	B. Baruah College Library	Yes		SOUL
8.	Gauhati Commerce College Library	Yes		SOUL

9.	Pandu College Library	Yes		SOUL
10.	L.C.B. College Library		Yes	SOUL
11.	K.C. Das Commerce College Library	Yes		SOUL
12.	S.B. Deorah College Library	Yes		SOUL

4.2 Areas of Automation in the Library

Table 3 – Areas automated

SI.No.	Library Name	Acq.	Cir	Cat	CAS	SDI	S. Control	Adm.
1.	GU Library	-	-		-	-	-	-
2.	IIT Library				-	-		
3.	Assam Engineering College Library	-	-		-	-	-	-
4.	GMC Library	-			-	-	-	-
5.	Cotton College Library	-			-	-	-	-
6.	Handique Girl's College Library	-	-		-	-	-	-
7.	B. Baruah College Library							
8.	Gauhati Commerce College Library	-			-	-	-	-
9.	Pandu College Library				-	-	-	-
10.	L.C.B. College Library	-	-		-	-	-	-
11.	K.C. Das Commerce College Library				-			
12.	S.B. Deorah College Library				-	-		

4.3 Status of Automation

Table 4 – Database record in the libraries

SI.No.	Library Name	Total record	Record in database	Percentage (%)
1.	GU Library	2,52,000	1,13,000	44.84
2.	IIT Library	96,000	All	100
3.	Assam Engineering College Library	35,000	25,000	71.42
4.	GMC Library	25,251	14000	55.44
5.	Cotton College Library	1,23,785	74,571	60.24
6.	Handique Girl's College Library	42,000	36,080	85
7.	B. Baruah College Library	40,120	All	100
8.	Gauhati Commerce College Library	27,638	24,000	86.83
9.	Pandu College Library	33,648	All	100
10.	L.C.B. College Library	14,077	2000	14.20
11.	K.C. Das Commerce College Library	12,400	All	100
12.	S.B. Deorah College Library	9752	7802	80

4.4   Available ICT Devices

Table 5 – Available ICT infrastructure in the libraries

SI.No.	Library Name	Server	Printer	Scanner	LAN
1.	GU Library	3	5	—	Yes
2.	IIT Library	Yes	Yes	Yes	Yes
3.	Assam Engineering College Library	—	—	—	—
4.	GMC Library	Yes	Yes	Yes	Yes
5.	Cotton College Library	—	Yes	Yes	Yes
6.	Handique Girl's College Library	1	2	—	On process
7.	B. Baruah College Library	1	4	1	Yes
8.	Gauhati Commerce College Library	1	1	1	Yes
9.	Pandu College Library	1	3	2	Yes
10.	L.C.B. College Library	1	Yes	—	Yes
11.	K.C. Das Commerce College Library	1	2	1	Yes
12.	S.B. Deorah College Library	1	3	1	Yes

From the above tables it is clear that most of the academic libraries of Guwahati are fully automated and networking facility is also available within their library to provide a wide range of services to its users, the other libraries which have till now not fully automated are also in the process.

5.   Guwahati Academic Library Network (GUALIBNET)

Guwahati city is the capital of Assam. At present the Guwahati city has number of deficit and non-deficit colleges, universities, IIT and technical colleges. The libraries of many of these institutions are well equipped and providing various services to its users with a good collection of printed and non-printed materials. Therefore computerized resource sharing of these libraries is very much essential to utilize the resources in a better way and generate new services and to improve the efficiency of existing ones. With this background a feasibility study is carried out to identify the prospects and limitation in the juncture towards lining up a road map to a network facility of academic libraries in Guwahati city.

I propose a design for networking of academic libraries in Guwahati, which may be called Guwahati Academic Library Network (GUALIBNET). The GUALIBNET is a computer communication network of the university and some college libraries of the Guwahati, with a view to improving the capabilities of resource sharing and information access of an academic community in Guwahati city.

5.1   Prerequisites of GUALIBNET :For developing a workable resource sharing network, a right mindset among the must be ensured before preparing the plan professionals of the participating member libraries is the pre-requisite. The following for library network (formation of sentence is not right)

- Institutional commitment to accept the measures to be adopted for resource sharing purpose.
- Fund and support for resource sharing.
- Attitudinal changes in library staff to undertake additional responsibilities in resource sharing.
- Training of library staff to understand and appreciate the changed situation.

5.2   Network Components of GUALIBNET: A typical set up components and their configuration for the proposed network is suggested as follows,

5.2.1   Hardware : Considering the application areas, data volume and future growth and networking needs, a typical network and communication hardware in a nodal center of the GUALIBNET are given below,

- Dual processor 500MHz seven class machine.
- 500+MB RAM.
- Minimum 40 GB hard disk space.
- 10/100 (Network Interface card)
- Database back up solution.
- UPS with at least 6 hour battery back up time.
- CD/DVD-ROM
- Scanner
- Printer with network capability

5.2.2   Software

The software required for the proposed network will be as follows,
- For the library routines like acquisition, circulation etc.
- For database creation and maintenance, etc.
- For communication interfaces.

In GUALIBNET, SOUL (Software for university library) will be used as library management software because most of the colleges and the university library of Guwahati has used SOUL for library management purpose. This will help in resource sharing among the member libraries.

5.3   Communication media : The network center (central node) and the member libraries will be linked with each other through fibre optical cable. The libraries should have their own LAN set up.

5.4   Database : A center organ machine should be installed for creating a union catalogue, comprising catalogues of all participating libraries in the network. The physical records of all the books, serials and non-book materials are stored in the main server. This database is made available to all the users of the respective member libraries.

5.5   Standardization : The problem of following different classification, catalogue codes and subject heading in participating libraries have to be solved for effective functioning of any network. GUALIBNET adopt the use of CCF, AACR2, and SLSH for standardization in information handling activities of the network system.

5.6   Manpower Planning : Where majority of the libraries have qualified and skilled manpower to handle IT components. Then the initial trust would be on creating the awareness for a network. Therefore the library staff of the participating libraries in the proposed network should be fully trained to work in an IT environment.

5.7   Funding of GUALIBNET : For the establishment of any network funding is the most important aspect. Funding for GUALIBNET may be requested from the Government of India as well as the state government. DONER under the planning commission, Government of India and U.G.C may also be approach for financial assistance.

5.8   Areas of Resource Sharing : Before set up any network, it should be determined the areas of resource sharing. In GUALIBNET the initial step of resource sharing are cooperative acquisition i.e. the collection should be cooperative; cooperative cataloguing, it includes web OPAC also; again coopera-tive training of library staff.

5.9   Guwahati Academic Library Network Model : The GUALIBNET model has been prepared by considering the existing infrastructural facilities, financial resources, manpower, and automation status of the academic libraries of Guwahati city.

From the analysis done in the previous, we can consider Gauhati University Library (K.K.H.L) as nodal center for GUALIBNET. The reasons are-

- ➲ It has a good collection of printed and non-printed materials.
- ➲ It has the maximum number of professional staff among all the twelve surveyed academic libraries of Guwahati.
- ➲ It has adequate fund for establishing as a nodal center.

Again Guwahati University library has the possibility to become a fully automated library within a short time. The automation process has been going on. Therefore as an oldest and largest academic library of Guwahati city K.K Handiqui library has been taken as the central node of this GUALIBNET. The other academic libraries such as IIT library, Assam Engineering College Library, Gauhati Medical College Library and different college libraries of Guwahati are connected to this central node for resource sharing. With the help of router the other nodes can also share their resources by pass. This will help the network if the central node fails to communicate. The organizational structure of GUALIBNET has been given below,
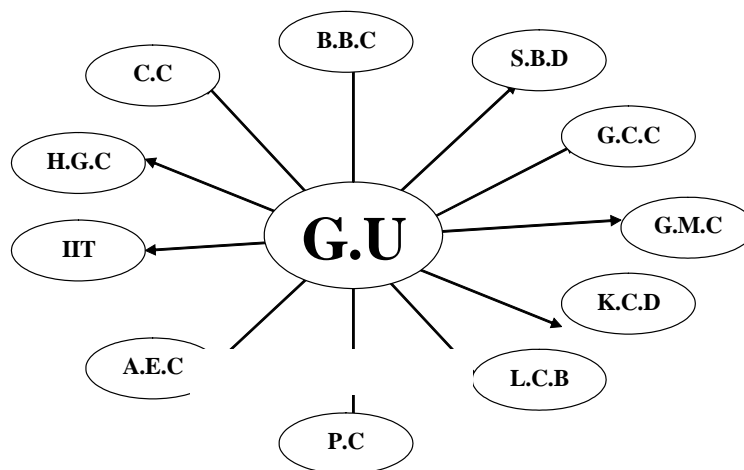

Figure 1: GUALIBNET Model

6.   Problems of GUALIBNET

In establishing the network some problems are likely to cope up, such as,

- ⊃   Who will take the initiative in bringing this network?
- ⊃   What will be the policies and guidelines for such a network?
- ⊃   Lack of compatibility between the computer facilities (Hardware & Software) available in different participating libraries.
- ⊃   Lack of trained human resources.
- ⊃   Lack of financial resources.
- ⊃   Lack of infrastructure facilities in the concerned libraries.
- ⊃   Lack of IT based information handling services.
- ⊃   Lack of coordination among the library staff and authority of the academic institution.
- ⊃   Lack of legislative measures in the library acts regarding network based library services.

⮂   Users, attitude, information seeking pattern and behaviors.

7.   Suggestion

The following measures may be helpful in developing this network:

(i)   National level intervention would be required for the coordination of such network, and ensure adequate and reliable funding.

(ii)   Policy maker must have awareness on the necessity of information network.

(iii)   Provision of adequate funding facilities for IT based information product and services.

(iv)   Provision of infrastructural facilities in all the libraries.

(v)   Arranging training to go in for IT based information services in libraries.

(vi)   The structure of the network such that it does not affect information accessibility.

(vii)   Evaluation of networking activities is an indicator of whether activities are conducted as planned and a way to improve further endeavors.

(viii)   Effective information exchange and dissemination within the member is essential to avoid duplicating of resources.

(ix)   The State Government of Assam should take the responsibility for the development of such a network.

(x)   Professional development/ Human resource development/Manpower development by organizing workshop, conference, seminar and lectures.

(xi)   All the bibliographic databases of the networking libraries should support standard format for lining databases even if same software has not been used.

(xii)   The nodal agency should be selected by considering the objectives of the proposed network and the availability of the necessary staff, collection and IT infrastructure and there must be a proper agreement based on the standard policies and procedures among the member libraries in the network for the efficient cooperation and resource sharing.

8.   Conclusion

Today we have many consortia in the country which have been proved useful cost effective but hardly find any local and regional network except a few which are operational and achieving their objectives. Inter library lending within the same city is also almost absent, when there could be no problems in implementation the same. Thus the GUALIBNET programme aims to contribute the modernization of academic libraries. It will also improve the inter library loan services among the participating libraries with smooth and speedy exchange of information through telecommunication links. In the conclusion it

is suggested that the establishing of Guwahati academic library network would be a major step in communication and serve as a focal point for the academic community of Guwahati. The success of the networking depends mainly upon proper planning and appropriate decisions taken by the appropriate authority form time to time. In the conclusion, it can be said that Gauhati Academic library network would be a major step for the academic community of Guwahati city if it will be implemented in a proper way. Further this study could be carried out to the academic libraries of the other states of North East India.

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