CHAPTER VI

SANSLIBNET – A PROTOTYPE DESIGN

6.1 INTRODUCTION

The application of computers and telecommunication capabilities to transmit vast amount of information and data over long distances of high speed has provided a break through in the field of resource sharing and other forms of library co-operation. One of outcome of such application is the coming into existence of many library and information networks, also known as co-operatives. The following of principle motives behind networking:

1. Maximizing the utilisation of existing information resources / collection by sharing

2. Providing speedy access to information resources located at different places through communications channels for mutual benefit.

3. Collection control and specification

The escalating cost of information resource materials, increasing cost of processing documents and their information contents, decreasing budgets in terms of real worth and vide use of computers have also contributed to the development of networks. Network evolution shows two trends:
1. A banding together of various types of information resources (e.g. Libraries, Information system, Referral centres) into a type of communication cooperative.

2. A Networks of computerized information activities, presumably interconnected to permit machine-machine interface. It is generally assumed that man will interface with the computers through remote real time access terminals.

6.2 NETWORK

A network implies computer and communication links that permit computers to communicate with each other and to share programmes, facilities, data and knowledge base. A network can be local, regional, national or international. It is for the electronic transfer of information between two or more points irrespective of distance. Networks have been developed to link industrial plans, banks, educational institutions, social welfare units, libraries and information centres, and so on. These networks provide resources and information to their users in larger volumes at greater speed than the earlier methods did.
6.2.1 Aims and Objectives

The major aims and objectives of academic information network should be:

- To evolve a national network, interconnecting various libraries and information centres in the country and to improve capability in information handling.

- To provide reliable access to document collection of libraries by creating Online Union catalogues.

- To provide document delivery service by the centres and to optimize information resources utilization.

- To implement computerization of operations and services in the libraries and information centres, following a Network Standard.

- To enable the users dispersed in rural areas irrespective of location and distance, to have access to academic information.

- To develop a database of an academic information and to maintain electronic communication of information for delivering academic information.

Networking Hardware

Networking hardware includes all computers, peripherals, interface cards and other equipment needed to perform data-processing and communications within the network. CLICK on the terms below to learn more about those pieces of networking hardware.
This section provides information on the following components:

- File Servers
- Workstations
- Network Interface Cards
- Concentrators/Hubs
- Repeaters
- Bridges
- Routers
6.3 **OBJECTIVES OF SANSLIBNET**

- To provide all Sanskrit vidyapeetha library resources to members in sharing and networking culture and deliver to them after due identification by using computers, its applications, professionals, optical-discs, CD-ROMs, and other technologies, besides development in Telecommunication and Information Technology.

- To extend the facilities to the members through remote login and to access data available in electronic form.

- To permit and share the library resources with other members reciprocally.

- To avoid as far as possible unnecessary duplication, reduction in foreign exchange and to coordinate efforts for suitable collection development and to maximise the utilisation of resources and other facilities.

- To develop common collection development policy.

- To make SANSLIBNET online access.

- To access the International database

- To serve other institutions of Sanskrit studies and allied lines

- To augment the infrastructure of SANSLIBNET.
6.4 DESIGN OF NETWORKING AMONG SANSKRIT VIDYAPEETHAS LIBRARIES

Taking into consideration the geographical distance, it is suggested to have a distributed network among the Sanskrit Vidyapeethas. In a distributed / fully connected network, members who have equal, but different, resources are connected with every other member. The foremost and basic rationale of the distributed network is the sharing of different resources of the network members by each other. The reasons for opting distributed network for the proposed SANSLIBNET are:

- Failure at one node / site will not collapse the system
- Quick processing of queries
- Increased flexibility and reliability in the network
- Lesser cost for storage and maintenance of database
- Maintaining of standardisation of database does not arise
- Administrative problems of network may not be arise among the participants
- Need for sophisticated and communication infrastructure does not arise
6.5 RESOURCE SHARING AMONG SANSKRIT VIDYAPEETHAS

On networking of Sanskrit Vidyapeethas Libraries, it is possible to provide the following resource and services to their clientele.

- Books
- Manuscripts
- Journals
- Catalogues
- Preprints
- Sanskrit Vidyapeethas Publications
- Lists of Publications
- List of A-V Materials such as Video Cassettes, Audio Cassettes, Slides, CD-ROM Service etc.

6.6 IMPLEMENTATION OF THE SANSLIBNET PLAN

It has been suggested that before that actual implementation of the proposed SANSLIBNET, a detailed system analysis has to be conducted.

The success of this project depends upon the following factors:

- Having adequate computer facilities.
- Appointing and training of the right personnel for development and maintenance of the system.
• Design and development of bibliographic database.

• Existence of an efficient and reliable communication system.

6.6.1 Phase-wise Implementation

Considering the existing infrastructure facilities, financial resources, manpower and technological aspects, the implementation of SANSLIBNET is considered in a phase manner.

The phase wise implementation has been based on the following conditions:

• Getting the Libraries as well as users tuned to resource sharing via network.

• Reasonableness of the cost.

• Introduction of computer culture in the Vidyapeetha Libraries.

It is felt that under the given circumstances, a three phase implementation is ideally suitable for implementing the SANSLIBNET.

The phase-wise tasks to be undertaken are discussed hereunder

6.6.1.1 Phase - I

The following shall be accomplished in Phase - I

• Introduction of computer culture in the Sanskrit Vidyapeetha Libraries.
• Procurement of hardware and software by individual Libraries for networking purpose.

• Setting up of communication infrastructure.

• Creation of machine-readable catalogue as per the standard format, preferably MARC 21.

• Internal procedures/systems computerisation of each Sanskrit Vidyapeethas Libraries.

• Providing training for the existing staff through deputation to INFLIBNET centre or any other training institute.

Hardware and Software Requirements for Web server

Software Requirements

• Windows 2000 Service Pack 2 + Security Rollup

• Internet Explorer 6.0 or higher version

• Terminal Services Setup in remote administration mode

• MDAC 2.6 Service Pack 2

• Internet Information Server (IIS) (included with Windows)

• Microsoft SQL Server 7 or higher

• Effective Library Software Packages

• Visual Studio Packages

• MS-Office 2000

• Photoshop 7.0 or Coral Draw 11.0 or higher
• Graphics Software such as Photoshop 7.0, Fractel Painter, Illustrator or Coral Draw 11.0 or higher

• Multimedia software such as 3D Studio Max or Maya or any other software

• Oracle 8.1 or higher

Hardware Requirements

• Dual-Processor 500 Mhz Server class machine

• 500+ MB RAM

• Minimum of 40 GB Hard disk space

• 10/100 NIC (Network Interface Card)

• Database Backup Solution

• UPS with at least 1 hour battery backup time

• CD-RW

• Scanner

• Printer with the Network Compatibility

Hardware and Software Requirements for the Network Nodes

Software Requirements

• Windows 98 or above

• Graphics Software such as Photoshop, Illustrator, Coral Draw

• Internet Explorer 6.0 (minimum)

• Ms -Office 97 or higher
Hardware Requirements

- Pentium III 733 MHz or faster Processor
- Minimum 256 MB for Windows 2000
- 10 Gigabyte or larger hard disk
- 10 Base T Ethernet Card
- 48X or faster CD-ROM
- Windows 98.

6.6.1.2 Phase – II

The following shall be accomplished in Phase – II.

- Setting up of the network
- Linking of the individual libraries of Sanskrit Vidyapeethas into the network
- Introduction of various user services through SANSLIBNET

6.6.1.3 Phase – III

The following shall be accomplished in Phase – III

- Bringing all the Sanskrit Vidyapeetha libraries and the libraries of Sanskrit studies into the SANSLIBNET
- Handshaking with other local, national and international networks such as INFLIBNET, DELNET.
6.6.2 Proposed Prototype SANSLIBNET Design

The output Design of the Prototype Network of Sanskrit Studies (Sanskrit Vidyapeethas) Libraries are shown in the following figures (Fig 6.2 to 6.18).

![Image of SANSLIBNET](image)

**Figure 6.2 Opening Screen of the SANSLIBNET Home Page**
Figure 6.3 Opening Screen of the Rashtriya Sanskrit Vidyapeetha Libraries

Figure 6.4 Rashtriya Sanskrit Vidyapeetha, Tirupati – Screen
Figure 6.7 OPAC – Search Screen

Figure 6.8 OPAC – Output Search
Figure 6.9 SANSLIBNET – Journal Collection List

Figure 6.10 SANSLIBNET – Shri Lal Bahadur Shastri Sanskrit Vidyapeetha, New Delhi - Details
Figure 6.11 Home Page of Rashtriya Sanskrit Sansthan Libraries

Figure 6.12 Shri Ganganath Jha Kendriya Sanskrit Vidyapeetha, Allahabad - Details
Figure 6.13 Kendriya Sanskrit Vidyapeetha, Garli – Details

Figure 6.14 Kendriya Sanskrit Vidyapeetha, Jaipur – Details
Figure 6.15 Shri Ranbir Kendriya Sanskrit Vidyapeetha, Jammu - Details

Figure 6.16 Shri Sadasiva Kendriya Sanskrit Vidyapeetha, Puri - Details
Figure 6.17 Shri Rajiv Gandhi Kendriya Sanskrit Vidyapeetha, Sringeri – Details

Figure 6.18 Guruvayoor Kendriya Sanskrit Vidyapeetha, Trichur – Details
6.7 **FUNCTIONS OF SANSLIBNET CONSORTIA**

Primary reasons for proposing SANSLIBNET Consortia are to provide an extensive access to information materials to the users of member libraries and other libraries in Sanskrit studies. The functions of proposed SANSLIBNET are:

- Those that serve the users/patrons.
- Those that serve the member libraries directly and the patrons indirectly.
- Those that support the network structure.

### 6.7.1 Composition of Consortium of SANSLIBNET

The composition of the Consortium consists of the following:

- The Head of the member institutions are the members of the Consortium of SANSLIBNET.
- The librarians of the concerned Sanskrit Vidyapeethas.
- The Chairman and the Member Secretary will be on a rotation basis for two years and extendable by the consortium if needed.
6.7.2 Powers and Functions

The powers and functions of the Consortium includes:

- On 15 days notice the consortium shall meet at least once in an academic year and as and when necessary.

- The consortium meeting shall be convened by the Member Secretary in consultation with the Chairman and can be held at any member institution.

- The Head of the Vidyapeethas where the meeting of the consortium is proposed shall be the Chairman of that meeting.

- Any amendment shall be passed by a two-third majority of the total members of the SANS LIBNET.

6.7.3 Working of SANS LIBNET

- All members of the SANS LIBNET create their library data in the electronic form, for reference, general reference books, textbooks, manuscripts, journals and other reading material.

- Semiannually contribute their library data for the union catalogue preparation and conversion into the electronic form.

- To respond within ten days of receipt of query, requirements, or a reply is sent.
• SANSLIBNET database is used for its own research programme and providing information to their users.

• Library software packages, conforms to the international standards (ISO 2709) for information exchange which facilitate data import and Export between Sanskrit Vidyapeethas has been advised.

• It permits the user to use any facility on due identification.

• The SANSLIBNET should have the collaboration with national level networks viz., INFLIBNET, INFONET, DELNET.

6.7.4 Finance

There are two funds, namely SANSLIBNET funds and the SANSLIBNET local fund will be operated:

• The SANSLIBNET creates a fund, which is called "SANSLIBNET FUND".

• Each SANSLIBNET member contributes initially Rs. 15,000 and Rs. 3,000 for annual renewal subscription.

• The fund received will be utilised for providing Union Catalogues/Common Information/Common Services to each member of SANSLIBNET and strengthening the same.
6.7.5 Admissions of New Members to the SANSLIBNET

- All members shall have a suitable computer and independent telephone line with fax machine, etc.

- The SANSLIBNET accepts any other Sanskrit educational institution as an institutional member if it creates its library database using the standard database and abides by the terms, conditions and rules of SANSLIBNET.

- SANSLIBNET explores and advises Sanskrit educational institution willing to become members of SANSLIBNET on how to convert the existing library records into acceptable standards to SANSLIBNET.

- The SANSLIBNET should have further plans for Online Access to International Databases.

6.8 TASKS AHEAD

The time required for the execution of the proposed SANSLIBNET may be completed in the following schedule of time. Considering the activities listed in Phase I, can be completed within six months span to time. The activities in Phase II and III may be executed within two months each. Therefore the proposed SANSLIBNET is to be completed within 10 months.
Taking into the significance of the SANSLIBNET Design, the investigator will submit the same to the authorities of the Sanskrit Vidyapeethas and would emphasise on the immediate adoption and execution of the proposed plan. Accordingly the authorities have to plan the financial implications, manpower training programmes and development of necessary infrastructure facilities in the respective Sanskrit Vidyapeethas in order to accomplish for the successful implementation of the SANSLIBNET Design.

6.9 BY-PRODUCTS OF THE STUDY

The present research has contributed for the production of the following by-products:

i. Selective list of Secondary Sources in the field of Sanskrit related subjects (*Appendix – C*).

ii. Database of institutions in India offering courses in Sanskrit related studies (*Appendix – D, E, F & G*).

6.10 DIRECTIONS FOR FURTHER RESEARCH

The investigator, based on the research, identified the following topics for further research.

i. Information needs and Information Seeking Behaviour of students and researchers in the field of Sanskrit Studies.

ii. Design and Development of Information System for Sanskrit studies.
iii. User attitude towards the application of Information and Communication Technology (ICT) in the Sanskrit Vidyapeethas in India.

iv. Comparison of Information Seeking Behaviour of Sanskrit Faculty with other disciplines.

v. Impact of Information and Communication Technology (ICT) on collection development and manpower development in the Sanskrit Vidyapeetha Libraries in India.