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Introduction
Networking and Resource sharing have been remaining as one of the thrust area in library and information services for long time. Dr. S. R. Ranganathan\textsuperscript{1} has emphasized much on this concept as library co-operation in his book ‘Five Laws of Library Science’. Indeed all five laws warrant the practice of networking and resource sharing for better and effective library operations and services. Network of college libraries under the umbrella of universities have been widely discussed, many projects have been initiated and undertaken at global level. In India particularly, UGC and various educational bodies recommendations also emphasized the necessity of networking of college libraries. The role of university library in clustering, resource sharing among the colleges and information access by avoiding the duplication of efforts and resources is immense. The INFLIBNET and NAAC are also emphasizing university and college libraries network and ensuring the role of university library in promoting the information environment of affiliated institutions.

Application of new information technology has brought dramatic changes in the library and information field. With technological advancement, libraries and information centres around the world have computerized their library routines, developed databases for shared use on computer networks. Besides, improving services and operations for improved performance, libraries have also been able to evolve effective computer networks with an aim to optimize utilization of resources and facilities. The library and information networks have potential to improve library services in several ways. It brings down the cost of information products and services in the network environment in shared mode. It enables libraries to offer need-based services to the end users eliminating the limitation of size, distance and language barriers among them. With evolution in library networks, the emphasis has moved from the networks as physical entities to the resources available through the networks. These
network-accessible resources include databases of library holdings, journal articles, electronic text, images, video and audio files, scientific and technical data and so on.

There has been a voluminous growth of published documents in the recent past. As a result no library is able to procure, process or store all documents that its users demand. According to Kent\(^2\) "it is difficult to anyone single library to acquire even one percent of the total document published in the world" due to one or more of the following reasons:

(i) Growth of Knowledge in different subjects  
(ii) Rapid increase of literature and growth of publications  
(iii) Increasing trend of new born subjects and specializations  
(iv) Limitations of funds  
(v) Increase in the cost of publications  
(vi) Increase in the number of members of user community teachers, scholars and students in universities.  
(vii) The information needs of academic community being wide in scope and varied in nature.  
(viii) Such information needs being often repetitive and recurring  
(ix) Lack of environment to make use of available computer and communication technology for efficient and production use in libraries.

Therefore some resource sharing is necessary between one library and another library to acquire more information in a specific subject with low cost as published records are increasing at an incredible rate and their prices are keeping pace, is such circumstances library cooperation will assume a pivotal role and resources sharing will become the focal point of cooperation.

As indicated earlier, the past few decades have witnessed knowledge and information explosion the world over and inadequate financial resources to do the best in terms of dissemination of knowledge and information. Under these circumstances,
resource sharing and cooperative functioning of libraries and information centres through networking becomes vital. Efficient resource sharing can be achieved by using recent advances in Information Technology, i.e. networking of libraries and information centres through Local Area Networks, Metropolitan Area Networks, and Wide Area Networks and so on.

Network of information/resource sharing is to use the computer and telecom link for transmission of information or data from one library to another. Keeping this concept in view, various library networks have been established for cooperation and resource sharing among libraries. They have grown mostly during the last thirty years in different geographical environments in order to cater to the specific needs of users. In the United States, there has been a proliferation of them. Library networks in other countries are also growing. Several models have emerged that provide specific services. However, it is noted that the essential functions should include:

- Promotion of resource sharing,
- Creation of resource sharing tools like bibliographic databases such as union lists of serials, union catalogue of books, periodicals, bibliographic databases of articles and other types of materials such as CDs, Video recording, sound recording, theses, dissertations, online and web-enabled information resources.
- Rationalization of acquisition,
- Adoption of international standards for creation of records uniformly
- Delivery of documents, etc.

1.1 INFORMATION NETWORKS

UNISIST II (1971)\(^3\) working document defines Information Network as “a set of inter-related information systems associated with communication facilities, which are cooperating through more or less formal agreements in order to implement information handling operations to offer better services to the users”.

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National Commission on Libraries & Information Science, USA in its National Programme Document (1975) defines a network as “Two or more libraries engaged in a common pattern of information exchange, through communications for some functional purpose”.

1.2 NETWORKING AND RESOURCE SHARING IN MODERN SOCIETY

The voluminous growth of published documents in the recent past, increasing cost of information sources, technological advancements that offer newer methods of information processing, retrieval and dissemination are some of the factors which have made resource sharing a necessity. The library co-operation is a very old concept and a form of resource sharing. There are large instances of such cooperation among libraries in the library literature (Kaul, 1999).

Need of resource sharing was realized by libraries a long back. Besides entering into inter-library loan practice, libraries also thought seriously of resource sharing in many other areas, such as co-operative acquisition, co-operative cataloguing, co-operative classification, etc. Inter-library loan has been practiced as one of the most popular resource sharing activity amongst libraries. Inter-library loan in a traditional library is severely affected by barriers of information communication, such as apathy of the lending library, distance, language, time etc. A computerized inter-library loan system overcomes these limitations. For resource sharing, the participating libraries need to come together and cooperate in two broad areas: (a) developing the collection on shared basis, and (b) developing services for exploiting such collection (Dhawan, 1999). Developing the shared resources is of greater importance and pivotal to the concept of resource sharing. In developing the shared resources, the focus is first on eliminating duplication in the acquisition of various participating libraries to the extent possible. Thereafter, the focus is on the selection of such publications, which the participating libraries agree to share, and later on their acquisitions. The efforts of participating libraries in developing the shared resources are, therefore, directed in two distinct directions: (a) Rationalization, and (b) Acquisition. There are several
limitations to the resource sharing in the print environment as it existed till recently: a) open access to shared resource not feasible; b) service depends upon library performance; c) access to shared resource at a cost.

User services are critical to the resource-sharing programme for its performance and effectiveness in providing access to shared resources. The libraries are required to organize and provide the user services are not always fully equipped to meet such obligations. However, modern information technology has made the task of resource sharing very simple and convenient. The new technology brings forward to the information field many products and services which have changed the nature of fundamental library objectives and operations. There are two technologies that have contributed to these revolutionary changes namely computer technology and telecommunication technology.

1.3 NETWORK BASED LIBRARY AND INFORMATION SERVICES

In this information age, with enormous growth of publication and emergence subject specialization and economic pressures on libraries, it has become essential for the libraries and information centers to think of sharing the information resources among libraries and optimizing the use of existing resources through the use of computer and telecommunication technology by establishing various networking systems.

Through library networking, users can scan and monitor the information they require, which a particular library doesn’t hold but other library holds that particular information, without loss of time and at a minimum cost. Resource sharing networks offer:

- Document delivery and interlibrary loan services
- Shared cataloguing
- Cooperative collection development
- Coordinated acquisition
- Reference assistance
Consultation and staff training

Email, facsimile service, bulletin boards etc.

Access through any network in the globe can be obtained virtually through Internet which is widely used international network. Automated libraries can also help sharing of information through CD-ROM networking. With the increasing trend in electronic publications particularly on CD-ROMs and networks, automated libraries are going to be converted into electronic libraries. The introduction of multi-user and multi task CD-ROM systems has made more economic for most of the organizations, especially where the same data or database are required for several users.

It is relevant to monitor that a number of Bharathidasan University affiliated college libraries have a status of rich document collection. Through automation and networking, these rich resources can be put to best possible are not only in their respective region but even outside whenever there would be demand for the information.

1.4 INFORMATION AND COMMUNICATION TECHNOLOGY, RESOURCE SHARING AND THE NETWORKING MODELS

Over the last two decades the libraries have witnessed impact of information technology that has been affecting the structure of the services to a great extent. Moreover, the problems of space, standardization, professional development of the staff, challenges posed by new technologies, drastic cuts in the library budgets have aggravated problem of the present day librarianship. However, the solution to the problems of information explosion, ever changing needs of users, increasing amount required for subscription to same number of periodicals, shrinking library budget, and devaluation of rupee and its impact on the library acquisitions can best overcome upon certain level by the following means: a) Use of computer and communication networks for resource sharing; b) Use of national and international databases through communications networks; and c) Introduction to full text CD-ROM and online based systems.
There are various resource sharing networks have been observed at local, regional, national and international levels. Normally, three levels of national resource sharing networks exist: a) Local: Information is stored in the local libraries in the form of Union Catalogue for local collection available in local libraries. b) Regional: Information is stored in regional libraries and services are provided on broad subject area basis. c) National: National Union catalogue is prepared on national basis and services are provided to users based on national resources. Given the wide scope for exploiting resources and facilities available in the participating libraries, it is possible to work out a number of models for developing resource sharing programs.

1.5 DEVELOPMENT OF LIBRARY NETWORKS IN INDIA

During the last five years, library and information activities in the country have entered a new era. Individual libraries are coming out of the proverbial Berlin Wall around them. They are trying to form a larger community in an effort to tackle the ever increasing demands for better services quantitatively and qualitatively in an environment already overstrained by pecuniary pressures. Forced, motivated, or logic driven, the librarians are coming out in larger numbers from their shell. The information scenario forced by circumstances and by design, there has been a spurt in activities on library network development in the recent past. Some of the factors responsible for promotion and support of such efforts in India have been:

- Increased awareness of the need for resource sharing.
- Resource crunch.
- Increased computer installations or access facilities in library environment and enhancement of computer literacy among library professionals.
- Improvement in computer communication facilities within and across geographical regions, and availability of general data networks like NICNET (Planning Commission), INDONET (CMC Ltd) ERNET (Department of Electronics) and more recently the I-NET (Department
of Telecommunications), VSNL for Internet & Private Service providers like Reliance, TATA Telecom etc.

- Creation of facilities for e-mail by networks above mentioned VSNL, SIRNET (Network of the Council of Scientific & Industrial Research set up by INSDOC) and the ICNET, SPRINTMAIL (SPRINTRPG) etc. in the private sector.

- Promotion of library automation and e-resources access by INFLIBNET, DELNET, NAAC, AICTE and other agencies.

1.6 CATEGORIES OF LIBRARY NETWORKS IN INDIA

- Development of Metropolitan Area Networks (MAN) in cities like Bombay (BONET), Calcutta (CALBINET), Delhi (DELNET), Madras (MALIBNET), Pune (PUNENET), Ahemdabad (ADINET), Mysore (MYLIBNET), Hyderabad (HYLIBNET) and Bangalore (BALNET).

- Development of countrywide networks like the INFLIBNET (for university libraries).

- Development of sectoral facilities like the BTISNET (Biotechnology Information System Network), and the proposed ones for oil and natural gas, management science and environment.

- Development of National Consortia like INDEST, UGC INFONET, N-LIST, CSIR Consortia etc.

1.7 NETWORKING AND RESOURCE SHARING MODELS AT NATIONAL LEVEL

In India during the recent period quite a large number of libraries and information centers are forming networks. The advent of computer networking as an accepted part of the library and information infrastructure has had a very significant impact on the way in which library and information systems are perceived. Indian information professionals, education specialists and scientists have realized that the
time has come to share the information resources and to coordinate mechanisms. This has resulted in discernible change in the information scenario in India. India is thus on the threshold to a new era of computer communication networks both for general purposes and for library and information purposes. There are variety of library networks are functioning in India to cater the needs of the user community such as national level network, metropolitan level network, specialized networks and institutional level networks. Here some of the notable exiting library networks and resource sharing models are mentioned below;

**INFLIBNET** (Information and Library Network, 1996) it is involved in modernizing university libraries in India and connecting them as well as information centers in the country through a nation-wide high speed data network using the state-of-art technologies for the optimum utilization of information. UGC-Infonet is an ambitious programme of UGC to interlink all the Universities in the country with Internet bandwidth, a pre-requisite for delivery of scholarly content subscribed through the UGC-INFONET Digital Library Consortium. The scheme has now been extended to 200 Universities and 6 Inter-University Centres. INFLIBNET also initiated National Library and Information Services Infrastructure for Scholarly Content (N-LIST) for providing access to e-resources to students, researchers and faculty from colleges and other beneficiary institutions. The Shodhganga also provides a platform for research students to deposit their Ph.D. theses and make it available to the entire scholarly community in open access. The repository has the ability to capture, index, store, disseminate and preserve ETDs submitted by the researchers. The UGC-Infonet digital library consortium provides current as well as archival access to more than 7000+ core and peer-reviewed journals and 10 bibliographic databases from 26 publishers and aggregators in different disciplines.
**DELNET** (Developing library network, 1996)\(^8\) is promoting resource sharing among the libraries through the development of a network of libraries. It aims to collect, store, and disseminate information besides offering computerized services to users, to coordinate efforts for suitable collection development and also to reduce unnecessary duplication wherever possible. DELNET is offering the following services to its member institutions like access to union catalogue and other databases, interlibrary loan and document delivery services, retro-conversion, reference services, professional training and technical support etc. DELNET at present has 2034 libraries as its members, of which 218 libraries are in Delhi, 1795 outside Delhi in 32 States and Union Territories and 21 in overseas countries.

**CALIBNET** (Calcutta Library Network, 1992)\(^9\) aims to provide the individual libraries and their members with cost-effective solutions to their information problems. The primary objective of the Project is building access to library and information resources available in the eastern region of India. **PUNENET** (Pune Library Network, 1992)\(^10\) objectives is to connect the libraries and other resource centers in Pune. It maintains centralized databases of information resources available in the participating libraries.

**MYLIBNET** (Mysore Library Network, 1994)\(^11\) provides faster communication to all the libraries in Mysore city through E-mail also it creating awareness in the field of current IT developments and its applications on libraries by conducting seminars/workshop/training programs etc. **ADINET** (Ahmadabad Library Network, 1994)\(^12\) is promoting resource sharing and disseminating electronic information among member libraries by connecting them through network and creating a centralized Union catalogue of their holdings. It plans to coordinate efforts for suitable collection development and reduce unnecessary duplication wherever possible.
**MANLIBNET** (Management Library Network, 2000)\(^{13}\) was established for sharing of resources and information among the libraries by fostering a spirit of cooperation and weaving these together in a networking arrangement. The primary objective of MANLIBNET is to provide a common forum to the professionals; and to develop understanding and co-operation particularly among management and business libraries and the librarians. It is developing strong linkages among management and business libraries for resource sharing. **GOAL-NET** (Goa Academic Library Network, 2004)\(^{14}\) is connecting academic libraries of Goa users can access the Union catalogue of all member libraries in the network and locate the copies of books in different libraries. The members of a particular library can individually access their own library independently.

**NKN** (National Knowledge Network, 2010)\(^{15}\) is a revolutionary step towards creating a knowledge society without boundaries. Globally, frontier research and innovation are shifting towards multidisciplinary and collaborative paradigm and require substantial communication and computational power. In India, NKN with its multi-gigabit capability aims to connect all universities, research institutions, libraries, laboratories, healthcare and agricultural institutions across the country to address such paradigm shift. The leading mission oriented agencies in the fields of nuclear, space and defense research are also part of NKN. By facilitating the flow of information and knowledge, the network addresses the critical issue of access and creates a new paradigm of collaboration to enrich the research efforts in the country. The network design is based on a proactive approach that takes into account the future requirements and new possibilities that this infrastructure may unfold, both in terms of usage and perceived benefits. This will bring about a knowledge revolution that will be instrumental in transforming society and promoting inclusive growth.

**NUCSSI** (National Union Catalogue of Scientific Serials in India, 1988)\(^{16}\) is a data repository of a large number of unique journal titles and library holdings belonging to major universities, science and technology institutions, research and development...
units of industries, higher institutes like IISc, IITs and professional institutes spread all over the country. NUCSSI provides information regarding the availability of journal titles in the libraries. Moreover, integration of database with E-mail service enables routing of library/user request information. The Regular updation of the database is enhanced with the online access granted to the participating libraries via internet, so that journal seekers can get the updated information free of cost and powerful search enables easy and improved access to locate a particular journal and its availability in various Libraries.

**IndCat** (Online Union Catalogue of Indian Universities, 2009)\(^\text{17}\) is unified Online Library Catalogues of books, theses and journals available in major university libraries in India. The union database contains bibliographic description, location and holdings of information for books, journals and theses in all subject areas available in more than 123 university libraries across the country. A Web-based interface is designed to provide easy access to the merged catalogues. The IndCat is a major source of bibliographic information that can be used for inter-library loan, collections development as well as for copy cataloguing and retro-conversion of bibliographic records. The IndCat consist three components available in open access to users and librarians.

### 1.8 NETWORKING AND RESOURCE SHARING MODELS AT INTERNATIONAL LEVEL

In the developed countries resource-sharing networking was started long back. USA is the birthplace of library networking and by now libraries in each state is networked to local, regional and national network. **Online Computer Library Centre**\(^\text{18}\) was founded in 1967; today, that idea of using technology to extend cooperation has grown into a worldwide organization in which almost 25,900 libraries, archives and museums in 170 countries are members. The shared cataloging service is among the busiest in the world, enabling libraries each year to catalog more than 222 million items. Cooperative advances have expanded to help libraries better manage workflows, collection management, reference services, resource sharing and digital
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materials. And tomorrow, new Web-scale services will amplify library cooperation even further. OCLC is also providing following services to their member institutions such as reference management system, integrating chat, email, and chat widget (Qwidget), Dewey Decimal Classification for use with OCLC's online cataloging services, Inter-library loan and document delivery services etc.,

**Aotearoa People’s Network Kaharoa**\(^{19}\) provides free access to broadband internet services in public libraries so that everyone can benefit from accessing, experiencing and creating digital content. The network benefits anyone who has access to a public library. It opens up the digital world to all people and communities by giving them access to computers, the internet and training. Scanners, audio recorders and digital repositories allow communities to gather, digitize and store their histories and memories and to share them with others. Libraries and their staff also benefit by building their skills and knowledge of the digital world and sharing this with their customers.

**Minnesota Interlibrary Telecommunications Exchange**\(^{20}\) is a publicly supported network of academic, public, state government, and special libraries working cooperatively to improve library service for their users in Minnesota, North Dakota and South Dakota. The Minitex is to enhance the effectiveness and efficiency of participating libraries by expanding their access to local, state, regional, national, and international information resources. **Tehama Country’s Education Network**\(^{21}\) is designed to maximize the use of this connection and other network resources throughout the educational community in Tehama County. Students and adults have the power to research topics using knowledge gathered and stored around the world. Users find a system that provides easy access county resources and data bases (A.V., Library, data processing, etc.) with schools and teachers.

**International Nuclear Libraries Network**\(^{22}\) promotes information exchange, cooperation, resource sharing and learning among nuclear information centres worldwide. The INLN is nuclear libraries’ forum to share resources, know-how and
best practices. An increasing number of nuclear libraries participate in the network to maximize resource usage, leverage and share knowledge and deliver lasting value to members. Joint Academic Network\(^{23}\) is a network access extends the edge of the network into learning and social spaces outside the campus, and to deliver JANET content and resources to the user whenever and wherever required. JANET is well placed to help the Library reach its broad range of audiences. All universities, colleges and research councils have direct connectivity to JANET and hence JANET’s ability to deliver documents electronically direct to the desktops of academic researchers is unparalleled.

Southern African Bibliographic Information Network\(^{24}\) is facilitating access to electronic information for more than 27 years. It products range includes library products and services, electronic publications, library management systems and legal products and services. Academic, public, government and corporate libraries from within South Africa and Africa make extensive use of our cataloguing, inter-lending and reference services to support and enhance the services that they offer to their end-users. Minuteman Library Network\(^{25}\) is a consortium of 43 libraries with 62 locations and a Central Site staff that work collectively to provide excellent service to its library users. The members include 35 public and 8 college libraries in the Metrowest region of Massachusetts. The vision of the minuteman library network is to foster a strong community of libraries providing people with optimal access to resources and information. This vision is realized through the network’s mission to strengthen member libraries through innovative and economical technologies, efficient resource sharing, collaboration, shared expertise and automating their libraries and sharing resources in a centralized database.

There are few other major academic and research information networks for sharing teaching, learning and research practices managed by apex bodies at global level such as Common Wealth of Universities\(^{26}\), Asia-Pacific Quality Network (APQN)\(^{27}\), United Nationals Educational, Scientific and Cultural Organization\(^{28}\),
International Association of Universities\textsuperscript{29} and WHO Library and Information Network Knowledge\textsuperscript{30}.

1.9 NEED FOR THE NETWORKING IN COLLEGE LIBRARIES

The above factors clearly reinstated the fact that integration of high-level technology is imperative for the successful execution of the various commitments of the libraries. Paul Zane Pilzer, (1990)\textsuperscript{31} the famous economist in his book entitled, “Unlimited wealth: Theory and Practice of Economy Alchemy” stated that the wealth of a nation depends on the human and physical resources multiplied by technology at an exponential rate. The analogy is applied in the educational environment also. The knowledge productivity and the human capital development of a university depend to a great extent on the rich collection of the library coupled with appropriate technology and the ability to handle them speedily. That means that a complete transformation is required in the medium, form, and functions of the libraries. Libraries have to move from print to the electronic media; they have to take a shift from building bibliographical databases to digitized databases; and they have to move from managing a single library to handle networks of networks.

The integration of technology into library system has demanded a complete transformation in skill acquisition of the professionals. They need to move from traditional classification, cataloguing and indexing activities to (a) designing of databases; (b) creating home pages; (c) navigation through networks, and (d) arranging for techno conferencing (e) applications of open access technologies (f) leveraging social networking of library and information communities and so on. In short, today’s information managers are expected to be experts in knowledge management.

It is quite appropriate in this context to review the initiatives from the government and the professional bodies in promoting high-tech libraries to be suitable to the current requirements. It is interesting to note that after having realized the value of the libraries in the national economy, the government of India has set up a world class information infrastructure to ensure exchange of information through various
consortium and library networks. It has also initiated a number of digital library projects and train the library professionals to work in a real time virtual environment and to handle the hybrid technology introduced in the library. It is against this background, this study is undertaken to measure the efforts taken in the direction of networking of college libraries affiliated to Bharathidasan University.

1.10 STATEMENT OF THE PROBLEM

The application of Information and Communication Technology in the universities and other academic libraries in the state of Tamil Nadu seems to be improved in the last decade. The liberal grants from the UGC and other government agencies and also the pressure from the users for the advance level of information retrieval techniques have enforced upon the libraries to create a networked environment in their libraries. However, the sudden implementation of the networked environment has created a number of problems as detailed below;

(i) Shortage of financial resources, (ii) Shortage of information resources, (iii) lack of ICT infrastructure (iv) inability of the conventional librarians to cope with the tools of the ICT in library operations, (v) unfamiliarity of the ICT trained librarians with the conventional operations of the libraries, (vi) shortage of professionals in consultancy and institutional expertise (for imparting training in the ICT based skills), (vii) problems of access to information faced by librarians and users through networks and (ix) understanding and co-operation from the respective institutions.

The existence of the aforesaid problems necessitates an examination of the prevailing environment and needed in building the college libraries crossing these barricades by pooling and networking the resources. Hence the problem chosen for the research is “Networking of college libraries affiliated to Bharathidasan University: A study”.

1.11 SCOPE OF THE STUDY

The present study also by considering the importance, besides examining information infrastructure of the libraries, tries to propose suggestions for development, reinforcement and creation of active and interactive communication between them.
This research consists of three parts. The first part deals with theoretical matters and conceptual foundations of network and networking and outlines some points about network objectives and actions, tasks and role of such networks towards sharing resources, pre-requisites of building network and its topology. Second part of the research reviews the current status of the affiliated college libraries. In this section, manpower status, collection development and cataloging, services and facilities, budgets and attitudes towards library networking were surveyed. The third part of this research tries to propose suggestions for improvement of libraries’ condition and providing active and interactive communication between them. For this purpose, a prototype model of university and college library network designed for the Bharathidasan University and its affiliated college libraries and proposed with the aim of automating library resources and services including cataloging, digitizing important resources, providing access to the internet, sharing databases such as books, periodicals and other information resources required by the library’s users.

1.12 SIGNIFICANCE OF THE STUDY

There are good numbers of initiatives at National and International level has been made in this area but it’s appropriate to link institutions at root level in remote areas. The University Library systems have to be strengthened to co-ordinate and support the affiliated college libraries in maintaining standards and uniformity for Information Management. This will be contributing in achieving the standards to provide inputs for policymaking and thus establishing national information systems. This further made the way for collaboration with international library networks.

The study will make an attempt to develop standard bibliographic database to enable computerized library operations as a base for delivery of information products and services in a distributed environment. The study also finds the ways and means for better resource utilization, content management and to avoid duplication in information processing.
1.13 INTERDISCIPLINARY RELEVANCE

Library and Information Science systems and services normally get involved in interdisciplinary approach in designing of Information Product and Services. The study necessitates the contributions from the faculty adaption of techniques of information technology and educational technology from the inception till its implementation. As the researcher also touches up on content development of teaching resources, it involves indexing, data mining and archiving, knowledge management principles and educational research methods.

1.14 OBJECTIVES OF THE STUDY

1. To assess the nature and quantum of resources available in the college libraries affiliated to Bharathidasan University.
2. To identify the ICT infrastructure in college libraries affiliated to Bharathidasan University towards library networking.
3. To analyze the ICT skills among Library and Information Science professionals working in colleges affiliated to Bharathidasan University.
4. To know the attitudes of the library staff towards library networking those who are working in colleges affiliated to Bharathidasan University.
5. To assess the feasibility of developing a library network of colleges affiliated to Bharathidasan University.
6. To identify the barriers of library networking in the colleges affiliated to Bharathidasan University.
7. To design the prototype model for implementation of network of college libraries affiliated to Bharathidasan University.

1.15 HYPOTHESES

H1. There is a significant difference in ICT infrastructure facility in college libraries affiliated to Bharathidasan University.

H2. There is a significant difference among the library and information science professionals in the affiliated colleges with regard to ICT skills.
H3. There is a significant difference among the college libraries in library and information services.

H4. There is a positive attitude among the library and information science professionals in colleges towards networking and resource sharing.

1.16 METHODOLOGY

The available literature on the topic has been studied and reviewed to examine the status of library and information system and networking and resource sharing activities among the libraries in India and other countries. The research work is designed to collect the basic inputs from the college libraries to understand the present status of the libraries. The questionnaire method has been applied to identify the quantum of library collection, library infrastructures, services, facilities, barriers and attitude towards library networking programme in the college libraries affiliated to Bharathidasan University. The structured questionnaire has been distributed to 107 Librarians of the Arts & Science colleges affiliated to Bharathidasan University. Among 20 colleges neither having libraries nor maintained by library professionals hence there are 70 (80.46%) of the respondents have replied to the given questionnaire. In addition to this the researcher also made field visits and applied observation method of the study to assess the requirements and selection of the sample colleges with ICT facilities for the feasibility of library networking, the bibliographic records were collected from the selected colleges and converted into standardized formats for implementation of network model. Based on the survey and questionnaire a prototype design for networking the resources of the affiliated colleges to Bharathidasan University have been developed and named as BHARATHILIBNET.

1.17 STATISTICAL TOOLS USED

The data thus collected were analyzed using SPSS package (11.5 versions). The statistical tools and techniques such as percentile, weighted arithmetic mean, standard deviation, chi-square, clustering analysis, dendrogram and proximity matrix were employed for the purpose of analysis. The data are grouped into two as autonomous
REFERENCES


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