CHAPTER I

INTRODUCTION
CHAPTER – I

INTRODUCTION

1.0 Introduction

Change is the law of nature and as it is very apparent in the present day society
and libraries are not an exception to these phenomena. During late seventies Lancaster
talked about the “paperless society” (1999). But Prashar states that “paperless society”
is a distance dream. Those days have gone when it was only a dream, but now the
very idea has been accepted all over the world. However, a step towards a paperless
society has been marching very rapidly and most of the libraries particularly
university and special libraries, have been allocating separate funds for subscription of
e-resources.

Owing to the emergence of Information Technology (IT) and its application in
libraries, print journals are being replaced by electronic journals which benefits
libraries and users in many ways. Users today can access electronic and print
information easily. Over the years the problems of missing issues, binding,
subscription and damage of papers have also been solved. Library consortia are a boon
to the librarians, in saving the cost of journals and optimizing library budgets.

Libraries are facing increasing demands for services while struggling with the
challenges such as the growth of information resources, high cost of library materials,
high expectations from users, budget cuts and much more. Library consortia are
created to help libraries obtain better prices by buying joint access for a greater
number of users, expanding access to print and electronic collections and developing
new services to meet user’s needs.

1.1 Genesis and Development of Consortia

“Library consortium” refers to the co-operation, co-ordination and
collaboration between and among libraries for the purpose of sharing information
resources. A “library consortia” is not a new concept. Early examples, from the late
1960s include the development of the Ohio College Libraries Center (OCLC) as a
regional computer system for 54 Ohio college libraries to share their resources and to
reduce costs, and the Birmingham Libraries Co-operative Mechanization Project
(BLCMP) in the UK. However consortia were not really common until the 1980s. The
main driving forces for collaboration among libraries, especially academic libraries, has been the increase in number of publications and the rise in the cost of publications as well as the decline in library budgets. The increase in student enrolment in higher education and increasing demands for library services and collections were other factors given, from the 1980s onwards, for collaborative efforts (Nfila and Darko-Ampem, 2002).

Historically, the common form of library co-operation was the sharing of union catalogue information, storage facilities, collection development and human resources at local, regional and national levels in the US (Payne, 1998). Later, other countries also ventured into co-operative efforts. During 1980s and 1990s many libraries in Western countries were involved with library automation, coupled with the increased use of computers in bibliographic processing activities and database searching. There was a need to share expertise on library automation and this was considered as a possible reason to move towards library consortia in the 1980s (Nfila and Darko-Ampem, 2002).

The development of the web in the 1990s imposed new challenges for libraries. In the print era, libraries used to buy a resource and own it. Copyright law allowed for fair use in ways that advanced education, study and scholarship. In the digital era however, use of information resources comes under contract law as libraries acquire licenses to use the material. Libraries become involved in several partnerships when a license is created. Electronic publishing also brought in many possibilities for resource sharing and consortia. The International Coalition of Library Consortia (ICOLC) is an informal group of some 150 library consortia around the world (Golnessa and Talawar, 2008).

Cooperation amongst institutions for sharing their library resources has been practiced for decades. However, the mode of cooperation has witnessed a transformation with the infusion of new information technology. The emergence of the Internet, particularly the World Wide Web (WWW) as a new information delivery medium, triggered proliferation of Web-based full-text online resources. An increasing number of publishers use Internet globally to offer their publications to the international community of scientists and technologists. The libraries and information centers, as heavy consumers of electronic journals and online databases, will benefit
greatly from this technology-driven revolution. The proliferation of electronic resources in a networked society has resulted in the development of "shared subscriptions" or "consortia-based subscriptions" to journals everywhere in the world. Shared subscriptions to electronic resources through consortia of libraries is a feasible strategy to meet the pressures such as diminishing budgets, increased user demands, and rising costs of journals (Arora, 2001).

1.2 Indian National Digital Library in Engineering Sciences and Technology (INDEST) Consortia

The Ministry of Human Resource Development (MHRD) has setup a “Consortia based subscription to electronic resource for technical education system in India” on the recommendation made by an expert group appointed by the Ministry under the chairmanship of Prof. N. Balakrishnan of IISc Bangalore. The consortium is named as the Indian National Digital Library in Engineering Sciences and Technology (INDEST) Consortium. The objective is to increase the access to electronic resources across institutions at highly discounted rate of subscription, and to meet the pressures such as diminishing budget, increased user’s demand and rising cost of journals.

The INDEST-AICTE Consortium is the most ambitious initiative taken so far in country. It would not only benefit 48 major technological institutions in the country (including IITs, IISc, NITs, IIITs and others), but it also invites all AICTE accredited and University Grants Commission (UGC)-affiliated institutions to join hands with the leading engineering and technological institutions in India and share the benefits it offers in terms of lower subscription rates and better terms of agreement with the publishers. The consortium’s headquarters is located at IIT Delhi. The membership of the consortium is open to any private or government funded engineering/technological/educational institutions. The consortium will charge nominal annual fee for its services. The e-resources that can be subscribed through the INDEST consortium are: IEL Online, Springer’s link, Applied Science and Technology Plus (ASTP), ABI/Inform Complete, ACM Digital Library, Compendex (1970+), MathSciNet, J-Gate online with CD-ROM back-up.
1.3 INDEST E-Resources

Electronic resources subscribed by the INDEST consortium can broadly be divided into the following two categories, namely e-resources and bibliographic databases

<table>
<thead>
<tr>
<th>S/N</th>
<th>E-resources</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ABI / Inform Complete</td>
<td><a href="http://www.il.proquest.com/pqdautoS">http://www.il.proquest.com/pqdautoS</a></td>
</tr>
<tr>
<td>2</td>
<td>ACM Digital Library</td>
<td><a href="http://portal.acm.org/portal.cfm">http://portal.acm.org/portal.cfm</a></td>
</tr>
<tr>
<td>3</td>
<td>ASCE Journals</td>
<td><a href="http://portal.acs.org/journals/jcl.html">http://portal.acs.org/journals/jcl.html</a></td>
</tr>
<tr>
<td>4</td>
<td>ASME Journals ( + A M R )</td>
<td><a href="http://www.asme.org/pubs/journals/">http://www.asme.org/pubs/journals/</a></td>
</tr>
<tr>
<td>5</td>
<td>Capitaline</td>
<td><a href="http://www.capitaline.com/intranet/INDEST_consortium.htm">http://www.capitaline.com/intranet/INDEST_consortium.htm</a></td>
</tr>
<tr>
<td>6</td>
<td>CRIS INFAC Ind. Information</td>
<td><a href="http://www.crisil.com/">http://www.crisil.com/</a></td>
</tr>
<tr>
<td>7</td>
<td>EBSCO Databases</td>
<td><a href="http://search.epnet.com/">http://search.epnet.com/</a></td>
</tr>
<tr>
<td>8</td>
<td>Elsevier Science Direct</td>
<td><a href="http://www.sciencedirect.com/">http://www.sciencedirect.com/</a></td>
</tr>
<tr>
<td>9</td>
<td>Emerald Full-text</td>
<td><a href="http://iris.emeraldinsight.com/">http://iris.emeraldinsight.com/</a></td>
</tr>
<tr>
<td>10</td>
<td>Euromonitor (GMID)</td>
<td><a href="http://www.euromonitor.com/gmid">http://www.euromonitor.com/gmid</a></td>
</tr>
<tr>
<td>11</td>
<td>IEEE/IEE Electronic Library Online (IEL)</td>
<td><a href="http://ieeexplore.ieee.org/">http://ieeexplore.ieee.org/</a></td>
</tr>
<tr>
<td>12</td>
<td>INSIGHT</td>
<td><a href="http://www.insight.asiancerc.com/">http://www.insight.asiancerc.com/</a></td>
</tr>
<tr>
<td>13</td>
<td>Nature</td>
<td><a href="http://www.nature.com">http://www.nature.com</a></td>
</tr>
<tr>
<td>14</td>
<td>ProQuest Science ( formerly ASTP )</td>
<td><a href="http://www.il.proquest.com/pqdauto">http://www.il.proquest.com/pqdauto</a></td>
</tr>
<tr>
<td>15</td>
<td>Springer Link</td>
<td><a href="http://www.springerlink.com/">http://www.springerlink.com/</a></td>
</tr>
<tr>
<td>16</td>
<td>Indian Standards</td>
<td><a href="http://10.180.1.34/bisindex/start.shtml">http://10.180.1.34/bisindex/start.shtml</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S/N</th>
<th>Bibliographic databases</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COMPENDEX on EI Village</td>
<td><a href="http://www.engineeringvillage2.org/">http://www.engineeringvillage2.org/</a></td>
</tr>
<tr>
<td>2</td>
<td>INSPEC on EI Village</td>
<td><a href="http://www.engineeringvillage2.org/">http://www.engineeringvillage2.org/</a></td>
</tr>
<tr>
<td>4</td>
<td>SciFinder Scholar</td>
<td><a href="http://www.cas.org/SCIFINDER/SCHOLAR/index.html(access">http://www.cas.org/SCIFINDER/SCHOLAR/index.html(access</a> through a Z39.50 Client to be installed on each PC)</td>
</tr>
<tr>
<td>5</td>
<td>Web of Science</td>
<td><a href="http://isiknowledge.com">http://isiknowledge.com</a></td>
</tr>
<tr>
<td>6</td>
<td>J-Gate Custom Content for Consortia (JCCC)</td>
<td><a href="http://jccc-indest.informindia.co.in/">http://jccc-indest.informindia.co.in/</a></td>
</tr>
</tbody>
</table>

(Source: http://www.indest.iitd.ac.in or http://paniiit.iitd.ac.in/indest)
1.4 Statement of the problem

The research problem is conceived under the title “Use of INDEST E-Resources by the Faculty of Indian Institutes of Technology: An Analytical Study”.

1.5 Explanation of the concepts

In order to provide the explanation of the terms in the title of the study the following definitions are given for the key terms, “INDEST”, “Consortium”, “Electronic Resources”, “Use”, “Faculty”, “Indian Institute of Technology” and “An analytical Study”.

1.5.1 Use

To put into service or apply for a purpose, employ, the act of using; the application or employment of something for a purpose. The permission, privilege, or benefit of use something.

The term “USE” in the study means, the act of using or the state of being used. In this context it implies the use of E-resources by the faculty (IIT’s).

1.5.2 INDEST

National Digital Library in Engineering Sciences and Technology (INDEST) is a “Consortium-based subscription” to electronic resources through the consortia of libraries is to increase the access to electronic resources across institutions at highly discounted rate.

1.5.3 E- Resources

Term used to describe all of the information products that a library provides through a computer network. This includes electronic books and journals, bibliographic databases, and library website pages.

1.5.4 Faculty

Faculty members of a particular profession regarded as a body; a group of persons entrusted with the government and tuition in a colleges, institutes and university.

1.5.5 Indian Institutes of Technology

The Indian Institutes of Technology (IITs) are a group of eighteen autonomous prestigious engineering and technology-oriented institutes of higher
education established and declared as Institutes of National Importance by the Parliament of India. Out of these first seven are governed by The Institutes of Technology Act, 1961 which has declared them as “institutions of national importance”, and lays down their powers, duties, framework for governance etc. Remaining eight new IITs are registered as society under Society Act. The new Institutes are in various stages of consolidation and development. The IITs were created to train scientists and engineers, with the aim of developing a skilled workforce to support the economic and social development of India.

1.5.6 An Analytical study

A setting of the mind or thoughts upon a subject, hence, application of mind to books, arts, or science, or to any subject, for the purpose of acquiring knowledge. It is a critical study of the variables in the study.

1.5.7 Consortia

“Consortium” is a term with many meanings. In the beginning the libraries worked together in the field of collection development and resource sharing in the widest sense of the word. Later on cooperative cataloguing systems were organized as consortia. As purchasing association in the networked environment the term “consortium” is now widely used. (Boekhorst and Scholle, 2001)

The term “consortium” is derived from the field of economics and refers to the grouping together of different independent companies in order to bring together financial or material resources under a single managing body for the joint performance of specific operations. A consortium may comprise an informal group with reciprocal agreements between partners or it may constitute a separate legal entity in itself. A purchasing group may be considered as an example of an informal consortium. (Chartron, 2001)

1.6 Need for the Study

In India, the UGC-INFONET, INDEST, HELINET and so on has been formed as library consortia for the effective utilization of e-resources. The periodic assessment of these consortia is necessary to access the usage impact and to know the relevance and credibility. Hence studies to be conducted by the various groups of users on the use of those consortia.
The Indian National Digital Library in Engineering Sciences and Technology (INDEST) is essential for the development of academic libraries due to the information explosion, diversity of users need and financial crisis. The earlier studies deal only with the use of e-journals, digital libraries and use of different types of consortia. Hardly few studies relating to INDEST has been conducted. Hence, this study becomes necessary. It will provide an insight into the Use of INDEST E-resources by the Faculty of selected Indian Institutes of Technology, as they awareness of new technologies in utilizing electronic resources and retrieval of information through consortia.

1.7 Scheme of the study

The study has been divided into the following chapters:

**Chapter I: Introduction**

This chapter presents the introduction about the research topic its need and the importance. It states the research problem, defines important concepts and present objectives and hypotheses of the study. It further gives scope and limitation of the study and presents brief summary of remaining chapter.

**Chapter II: Review of Related Literature**

This chapter brings out the review of literature on various aspects of INDEST- Consortium, Digital Library Consortia in India, Networking and Resource Sharing, E-Resources and Services, Use and Impact of E-Resources, Management of E-Resources, Marketing of E-Resource, Role of librarian and E-Resources and Evaluation of E-Resources respectively.

**Chapter – III: Objectives, Hypotheses, Scope & Limitation and Methodology.**

**Chapter – IV: ‘Profile of Indian Institutes of Technology’, this chapter presents the profile of Top Seven Indian Institutes of Technology covered under the present study.**

**Chapter-V: ‘Analysis and interpretation of data’, this chapter presents the analysis and interpretation of the data collected from the Indian Institutes of Technology (IITs) faculty with regard to the use of INDEST e-resources.**

**Chapter-VI: ‘Summary and Conclusion’, this chapter describes the summary of the findings observed in the study, recommendation are made with various views. Conclusions of the study and suggestion for future studies are also presented**

At the end, the Bibliographical references are enlisted, along with appendices.