

Research Report

A Study on Library Consortia in Science and Technology: Problems and Prospects*

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INTRODUCTION

In global scenario "Libraries consortia in science and technology: Problems and prospects" seems to be most apt topic of study when it is, at this very moment, undergoing an extraordinary transformation. Due to explosion of information, need is *felt* of client based information *stable budgets, archiving of information, state of the art demand and use of communication system and changes in the teaching, learning and research process which are forcing us to find new strategies of resource sharing in library and information field.*

The pressure of competition in information market is enhancing and compelling the information providers i.e. publisher, libraries etc. to exploit new technologies and processes to remain competitive in their chosen segment.

Recent developments in science and information technology have made it easy to share the resources under the umbrella *of library consortia. The major benefits of library consortia are:*

- (i) Ensuring availability of information resources *for a long period.*
- (ii) Good product quality through the service;
- (iii) Availability of documents/data on desktop;
- (iv) Simultaneous access by a large number of users;
- (v) All-time accessibility *to information;*
- (vi) Saving of funds;
- (vii) Functional advantages of e-service as opposed to that of print, such as fast search, print, and downloading of full text; and

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(viii) Browse additional facilities such SDI and link to other internal and or external information sources.

This study reveals the promotion and development, present situation and future role, services and activities of library consortia in the field of science and technology, and their prospects in Indian scenario.

2 THE PROBLEM

There are some basic facts, which are forcing us towards forming library Consortium for better sharing of resources and to overcome from the present situation.

The Internet has created a web of revolution, which is more powerful than the industrial revolution. It is altering the norms, forms and processes of acquisition and dissemination of information. Libraries consortia are most suitable platform to share the resources for maximum utility with the use of Internet. In this back drop the study "Libraries consortia in science and technology: Problems and prospects" was undertaken.

3 OBJECTIVES

The major objectives of the study are:-

- to identify the major problems faced by the members of library consortia in Indian scenario.
- to evaluate the utility of library consortia in the field of science and technology.
- to examine the present role and future of the library consortia in science and technology.

The study is exploratory in nature and examines the real picture of selected member libraries under the *INDEST Consortium*.

4 SCOPE OF THE STUDY

Review of research literature reveals that in Indian context there is hardly any previous scholastic work on this topic. Though there are several articles and research papers available on the library consortia and their related subjects. But ironically no such type of study report is found on Indian scenario.

In India, library consortia are in developing phase and in the field of science and technology a few library consortia are available, but these are still in their infant stage. Due to the unawareness of this concept, no research work has been carried out so far.

The following national and international consortia have been included in the study.

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- (a) FORSA (Forum for Resource Sharing in Astronomy and Astrophysics)
- (b) UGC-Info-Net (University Grants Commission -Information Network)
- (c) INDEST Consortium Consortia (Indian National Digital Library on Science, Engineering and Technology Consortia)
- (d) And leading international consortia's. i.e. JISC (Joint Information Systems Committee),
- (e) NESLI (National Electronic Site Licensing Initiative, Great Britain),
- (f) CRL (Center for Research Libraries, North America),
- (g) IDAL (Illinois Digital Academic Library),
- (h) LCO (Library Consortia in Oregon, Washington),
- (i) SALC (South Asia Library Consortia),
- (j) WRLC (Washington *Research* Library Consortia),
- (k) ICOLC (International Coalition of Library Consortia), and the *following* members libraries of INDEST Consortium have also been included in the study.
- (l) Members libraries of INDEST Consortium i.e. Indian Institute of Technology, Delhi
Delhi College of Engineering, Delhi, Netaji Subhas Institute of Technology, New Delhi

5 .METHODODOLOGY

The methodology adopted *for* the study consists of the following three stages.

5.1 Literature Survey

The first stage was *to* find the related information on the subject from popular search engines i.e <http://www.google.com>, <http://www.yahoo.com>, <http://www.altavista.com>, <http://www.msn.com> etc. E-articles and other related information from the websites on library consortia in science and technology were recorded *to* understand the activities, processes, and difficulties on various stages. various types of source material were collected on Indian consortia such as FORSA (Forum for Resource Sharing in Astronomy and Astrophysics) from the website of <http://www.infolibrarian.com>, on UGC-Info-Net from <http://www.ugc.ac.in>, on INDEST CONSORTIUM (Indian. National Digital Library on Science, Engineering and Technology Consortia) from <http://www.oaniit.iitd.ac.in/> INDEST Consortium and <http://www.iitd.ac.in> (IIT Delhi), and on leading international consortia's. Le. JISC (Joint Information Systems Committee), NESLI (National Electronic Site Licensing Initiative, Great Britain), CRL (Center *for* Research Libraries, North America), IDAL (Illinois Digital Academic Library), LCO (Library Consortia in Oregon, Washington), SALC (South Asia Library

Consortia), WRLC (Washington Research Library Consortia) and ICOLC (International Coalition of Library Consortia) from the website of [http:// www.library.yale.edu/consortia/](http://www.library.yale.edu/consortia/). The publications on the matter in Indian concept are hardly available, so the study was made on the basis of in house reports received from IIT, Delhi and web search information.

52 Questionnaire Method

The second stage comprised questionnaire survey, having two separate instruments. The first questionnaire was meant for institution aimed to identify the key variables and sent for collecting the feed back about the exactness and effectiveness of the data-collection instrument to IIT, Delhi; DCE, Delhi; and NSIT, New Delhi in respect of availability of infrastructure i.e. computers, printers, internet connection, scanner and CD-Writers etc., strength of users i.e. students, faculty members and other staff members, user/staff training, subscription of E-resources and monetary benefits, and second questionnaire for users i.e. faculty members and students aimed to identify the problems in information access, and future role of the E-information. The feed back! information was also used to refine and update the questionnaires and finally released for data collection. The Questionnaire designed was very simple to understand, easy to reply and to cover all necessary aspects of the study.

In the third stage, the collected data was evaluated, analyzed and presented in the form of text, tables, graphs and in appendices.

521 Questionnaire Designing

There were two types of questionnaire designed for collecting the necessary data, first questionnaire was designed for member libraries of INDEST Consortium and second was designed for library clientele, i.e. students and faculty members.

In the first questionnaire all necessary aspects of consortia in science and technology were covered in respect of membership of consortia, strength of users, problems faced under consortia, subscription and expenditure of e-journals under consortia, availability of infrastructure i.e. computers, printers, internet connection, scanner and CD-Writers etc., and other staff members, user/staff training, subscription of E-resources and monetary benefits for subscribing the online journals under the consortia membership.

The second questionnaire was designed for users i.e. faculty members and students to identify the facilities and problems i.e. infrastructure, Internet connectivity, accessibility, staff co-operation and future of INDEST Consortium/ E- information.

522 Data Analysis

After receiving the necessary data, the responses were properly evaluated, analyzed and presented in the form of text, tables, graphs and appendices in the report.

53 Pilot Study

Before finalizing the questionnaire, the member libraries were discussed in detail with the help of research guide and with librarians of the institutes. All factors of the study were considered to make the concept clear in respect of collecting the data of exiting consortia in the field of science and technology. Ultimately the *INDEST Consortium* was selected for thorough study, which is actively functioning and providing its services to its 115 member libraries i.e. 1. Core members of all IITs, IISc-Bangalore, NSITs, ISM-Dhanbad (Indian School of Mines), NERIST-Itanagar (North Eastern Regional Institute of Science and Technology), SUET -Longowal (Sant Longowal Institute of Engineering and Technology), IIIT -Allahabad (Indian Institute of Information Technology), ABVIIT -Gwalior (Atal Bihari Vajpayee Indian Institute of Information Technology), IIMs, NITIE-Bombay (National Institute of Training in Industrial Engineering), 2. AICTE financial supported government engineering institutions, and 3. self supported institutions. INDEST Consortium is subscribing almost all e-journals in the field of engineering, science and technology from leading publishers of the world. It was very difficult to conduct the survey from all member libraries, so that it was decided to select one library each from all categories of members of INDEST. The names of the selected members for pilot study have been given under the heading of scope of the study:

54 Interview Method

The draft questionnaires were got filled up with the help of Librarians and the concerned library staff and users in a personal way, and the doubts that arose in conversation were clarified on the spot. Thereafter the questionnaire was revised accordingly. The final questionnaire was used for collecting the information from member libraries and the users.

6 ORGANIZATION OF THE STUDY

The study has been organized into four chapters. Before. chapters, contents page, acknowledgements, list of tables, list of graphs, and list of abbreviations have been placed.

Chapter one: Introduction: It gives information about the topic in brief, highlights the problem, statement of the problem, scope of the study, objectives of the study, definitions of the basic terms used in the study, and methodologies adopted, and procedures applied in the study.

Chapter two: Library Consortia: It provides information on basic concept, definitions, and extensive and elaborative studies on libraries consortia on science and technology and the knowledge gathered from various resource. The

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information has been arranged in the sequence i.e., background, Indian scenario, factors of resource sharing, international scenario, terms and conditions in consortia, and functions of the consortia.

Chapter three: Data Analysis: It gives the results of data collected through the questionnaires. The data have been analyzed at two levels, the first was based on the response of the librarians of various institutes under *INDEST Consortium* membership and the second was based on the replies of the users of these institutes who were the ultimate utilizer of the facility under consortia and further the data have been analyzed again on two stages. At the first stage, data under first level have been taken into consideration on individual basis of each institute and at the second stage a comparative statement has been made among the institute. After analysis, the data has been presented in the form of tables, graphs (i.e. infrastructure, users strength, subscription of online journals and print journals during 2002, 2003 and 2004, profits under the consortia on e-journals, the problems faced by the users community, e-resource users group and their training, and satisfaction rate).

Chapter four: Conclusion and Suggestions: It incorporates with the findings, conclusions of the research study and further suggestions given on the subject including three appendices:

Questionnaire to collect data from the members' institute of INDEST Consortium.
User's satisfaction questionnaire.

List of ICOLC (International Coalition of Library Consortia) participant members.

7 FINDINGS

After analyzing and presentation of data, the findings have been included on the study. The study was focused on current Indian scenario and extended facilities and benefits provided to the users under the consortia umbrella.

The first objective was to study the major problems faced by the member library consortia. The result of the objective was carried out after analyzing the *questionnaire* from the institutes.

1. It has come out that e-journals or e-resources, which have been subscribed by the consortia, are bulk packaged or whole publications of the publishers. The same terms and conditions are extended by consortia to their member libraries, which do not allow subscribing some or a few journals as per their own requisition; they are bound to procure the full package of the publisher.

2. In Indian scenario, the concept of consortia and facilities under it is a new way of providing the information and services to the ultimate user. The readers are not much aware about the electronic facilities extended to them; this is another

problem for libraries and has become their duty to make them aware by conducting user e-education training programme.

3. Some times, it has been observed that the sanctioning authority or persons involved in the decision making are not satisfied with the concept of electronic accessing, because there is nothing physical and they are not ready to approve the finance. Without physical presence, the audit does not accept the argument of librarian and they always make these objections, because all the resources provided by the publishers are based on IP address or password, which can be accessed for the limited period of subscription. After expiry of subscription, there is nothing to prove that the library had been subscribing the e-resources. So it becomes the duty and responsibility of head of the library to convince the decision making authority as well as satisfy the audit party.

The **second objective** was to evaluate the utility of library consortia in the field of science and technology. The point of utilization of consortia in science and technology was very important and it could be defined or evaluated only by the users of the consortia, no outsider could imagine the facility and benefits under the membership of consortia.

1. The study shows that up to 76% savings have been noted on over all subscription of e- journals during 2003 and 2004 and it depends upon the strength of consortia members, if the number of members increases the benefits under consortia increases in the same ratio. It has been observed that on some specific collection, more than 90% savings for libraries through consortia have been offered by the publishers. The member libraries are in the position to procure more e-journals than the print journals under the umbrella of consortia in the same amount.

2. It is found that continuing subscription for IEEE/IEE Electronic Library (IEL) by the member libraries for five years of e-journals, entitles them for getting the back volume archives of these journals, which is the most significant feature of the service..

3. It has also been observed that utilization of e-journals is much more than the print journals and the cost of the e-journals is much less than the print journals.

The third objective was to study the present role and future of the library consortia in science and technology. The system of consortia has been accepted and promoted by the Central government. The INDEST Consortium has been partially financed by the government and other support has also been extended to promote the concept. The result of the second objective has proved the maximum utility in different angles and ways.

- The research scholars, faculty members have found it very useful due to various dimensions for providing facilities. Those who are preparing their projects, find online assistance, gather information and save the search results directly in their files.

- The satisfaction rate of member libraries and readers is very high which is based on the services and facilities provided under the umbrella of consortia.

8 CONCLUSION AND SUGGESTIONS

It has been observed that there are so many International Library Consortia successfully operational and providing maximum e-information from the minimum expenses in all areas of knowledge, working in the field of education, research and development. We should not wait for seed money to facilitate development towards the electronic or hybrid library. We are living in very turbulent times where things change rapidly in our nearby environment. The commercial publishers and intermediaries offer today their own integrated electronic libraries. If our library does not make significant progress towards making instant access for the users to a significant amount of electronic information resources, we run the risk that our institution decision makers and key users will go elsewhere for satisfaction of their information needs. Therefore it is very important that library managers take the necessary steps in paving the way towards the digital library and that has to take place very fast.

The most important thing here is making funds available for this development by reducing the library "paper work" and adjusting staff numbers involved in those processes.

Ideally consortia should continue to work at the short-term goal (obtaining as much content as possible at the best price) while contributing substantially to the support of emerging initiatives in affordable scholarly communication. And, also ideally, scholarly publishing initiatives should broaden their base of support beyond their individual library constituents and respond to the growing role that consortia play.

Institutions must change their primary operations drastically in the coming years. Conventional educational strategies are ways too expensive to meet the demands for further education and lifelong learning in our societies.

As consortia become a major force in information delivery; they must take on a wider public interest agenda. They need to focus on their obligation to further the common aspirations of libraries and librarianship to provide equitable and affordable information to all. They need to become real players in the creation and growth of wholly new systems for the creation and dissemination of scholarly communication. To ensure long-term changes in the affordability and availability of scholarly information, consortia need to be more than just buyers' clubs. They need to become partners in inventing new ways of information creation and discovery.

With the developments in scientific publishing and implementation of new technologies we have a historical and unique opportunity to use technology-not to do old things differently, but for the first time to do different things.