

LIBRARY CAPACITY BUILDING THROUGH E - JOURNAL CONSORTIA: THE INDIAN SCENARIO

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ABSTRACT

The proliferation of E-publishing across the world have brought in a revolution in scholarly journal publication, subscription, access and delivery mechanism. E-journals are electronic equivalents of their print counter parts possessing many added features. E-journals offer a range of potential advantages to libraries and end-users: multiple simultaneous access to the same issue, remote access, in-built searching facilities, multi-media capabilities and reduced storage concerns. As a result of the above, libraries today buy licenses for an ever-increasing number of E-Journals from a range of different publishers and providers. At the same time the library budgets are dwindling and hence librarians are forced to work together for alternate strategies towards collection enrichment and sharing of resources. Consortium based library subscriptions to E-journals and electronic full-text Databases are picking up good momentum in India. Over the past five years more than ten national level Consortia have come into existence and started playing around in the country. INDEST, CSIR Consortium, IIM Consortium, IBFLIBNET's Infonet, FORSA etc. are successful ones to name a few. At the same time Library Consortia not free from problems. There are various issues relating to consortia like uninterrupted online access, perpetual access to back issues, pricing, licensing, copyright and archival solutions etc. These need to be strategically tackled and well addressed to get the best out of the consortia. This paper discusses the salient features of E-Journals, major E-Journal consortia initiatives in the country, benchmarks and models, advantages of consortia subscriptions and problems associated with consortia.

Introduction

Presently E-Journals have become the largest and fastest growing areas of the digital collections for most of our libraries. For instance, the E-Journals a few years ago numbered just few hundreds of titles, are now running in many thousands and the rate of growth is phenomenal as well as amazing. The advancements in digital technologies and the recent proliferation of E-Publishing across the world have brought in a revolution in journal publication, subscription, access and delivery mechanism. E-journals are the electronic equivalents of their print counter parts possessing numerous additional features. E-Journals often referred to interchangeably as "Electronic Serials", "Online Journals" and "Electronic Periodicals". Lancaster (1995) defines E-Journal as "a journal created for the electronic medium and available only in this medium" (1). Electronic serials may be defined very broadly as any journal, magazine or newsletter which is available over the internet.

Salient Features

E-journals are becoming increasingly in demand both as a means of rapid desktop access to current research materials and as a way to view past volumes. E-journals offer a range of potential advantages to libraries and end-users:

- Allows remote access
- Can be used simultaneously by more than one user

- Provide timely Access and at a 24 X 7 X 365 formula
- Supports different searching capabilities
- Accommodate unique features (e.g. Links to related items, reference linking)
- Save physical storage space
- Can support multimedia information

As a result of the above advantages, libraries today buy licenses for an ever-increasing number of Electronic Journals from a range of different publishers and providers, and use a diverse set of technologies for information delivery (2).

Subscription, Access and Pricing Models

A variety of subscriptions, access and pricing models are in vogue for E-journals. Electronic journals are literally the entire journal, along with the full content retained in print (if there exists a print version), available in digital format and accessible online throughout the world. An electronic journal is therefore a whole journal, and libraries can subscribe to electronic journals from publishers or through a second party (e.g. vendors) just like they subscribe to print journals. This distinction between publishers and second parties is an important one, as these are the major two ways libraries get electronic journals. Some companies (also known as aggregators) create collections of entire journals and sell access to these collections.

In summary, there are three major ways through which electronic journals could be sourced in libraries:

1. E-Journal sourced directly from publishers
2. E-Journal through second parties such as journal vendors and Gateways (Ingenta, J-Stor etc.), and
3. E-Journal through journal aggregators (Proquest, EBSCO etc.).

Access to E-Journals could be arranged from the respective publishers against User ID / Password or through IP authentication. For a wider audience (campus-wide, enterprise-wide), IP based access is mostly preferred. Some publishers even offer both the access options. These decisions are mainly based on the publisher's policy on online access and how much restricted the access to be.

There exist a number of pricing models for electronic journals such as the online only, online and print, print and online, flip-pricing, pay-per-hit, pay-per-view, pay-per-download, pay-per-print, deeply discounted pricing etc. Some of the other popular models include the FTE (Full Time Equivalence) based pricing", "core subscription plus pay-per-view", "usage based pricing", "licensee membership fees" etc. Based on the nature of the subscription / licensing arrangements and the availability of funds a number of models can coexist in a practical library setting (3).

It is disheartening to note that neither the libraries nor the publishers have sufficient experience towards fixing the cost of E-Journals. This is an area where libraries are being severely exploited and this need to be addressed on a war footing.

Need for E – Journal Consortia

Over the past 10 years there has been substantial increase in the production of E-Journals the world over. According to statistics, out of over 1,50,000 serials published the world over, more than 70,000 cover scholarly communications, and among these more than 20,000 titles are electronic journals and are accessible in the Internet. More than 2500 among these scholarly journals are free for all, which comprise a vast treasure of scholarly content from around the world (4).

At the same time, the user community also has been influenced by these technologies to such an extent that there has been demand from users for providing such electronic information services in the libraries. The situation prevailing in the current library scenario reveals that it has reached a critical mass both in terms of information products as well as the number of users. On the other side library budgets are shrinking. So librarians are prompted to work together for forming consortia for subscription to E-Journals.

The Technology paradigm

With the advent of the Internet, librarians realized the potential of Web technologies for the effective use of resource sharing. The key advantage is that the Internet can be used as the carrier network by all member libraries of a resource-sharing network. All that is needed is to have good Internet connectivity which is reliable and dependable. The common user interface provided by the Web browsers enables integration of access to shared resources (e.g. union catalogues) and also to local library collections and services. Integration of messaging and file transfer protocols in the Web enable easy support for inter-library loan and cataloguing efforts. Since Internet offers platform independent protocols and public domain tools, development of new applications and services and value addition to existing services becomes quite easy.

Consortia approach to E-Journal Subscriptions

A library consortium is a collective activity of a group of libraries towards a common goal of sharing resources (5). With the availability of the state-of-the art information technology solutions and the web revolution, libraries are now better off in terms of easy access to more information through meaningful co-operation among themselves.

The consortium approach is a win-win situation for all its stakeholders – users, publishers, and libraries – all alike. Users are the ultimate end beneficiaries of such initiatives.

For libraries (involved in the consortia), consortia offers several benefits including the following:

- Access to otherwise un-subscribed materials;
- Scope for electronic archives;
- Availability and monitoring of usage statistics;
- Getting deep discounts through joint pricing negotiations – hence lower unit cost of information;
- Reduced storage costs;
- Developing common resources databases;
- Effective document delivery systems;
- A single interface and access point;
- Enhanced search facilities;
- Better scope for developing a union catalogue among participating libraries, etc.

For publishers, the consortium offers reduced attrition; improved income stability; incremental revenue; and greater visibility of their products.

In addition, a wealth of relevant resources is freely available on the Web for libraries to incorporate into their e-collections and make them readily available to their users. In order to survive the array of challenges and also to have a meaningful presence in the digital era, libraries are rapidly adapting to the changing environments. Recently the concept of library resource sharing has been largely influenced by a variety of nation-wide techno-centric consortium approaches in pursuit of optimizing the libraries' resource base while achieving substantial savings through combined and coordinated bargains with publishers. There are

several examples of web-based systems supporting resource sharing, collection development and professional enhancement. Applications include union catalogues, cataloguing, cooperative acquisition, inter-library loan, reference and referral services, retrospective conversion and so on. A few such international efforts include the following:

- Texas State Electronic Library (<http://link.tsl.state.tx.us/>)
- State Library of California (<http://www.library.ca.gov/index.html>)
- Consortium of University Research Libraries (CURL, <http://www.curl.ac.uk>)
- Consortium of Academic Libraries in Manchester (CALIM, <http://rylibweb.man.ac.uk/calim>)
- Colorado Library Information Network (<http://www.aclin.org/>)
- Washington Research Library Consortium (WRLC, <http://www.wrlc.org>)
- BIBSYS (Shared University, Research and National Library of Norway (<http://www.bibsys.no/english.html>))

Internet and the Web have given a strong impetus for consortia-based resource sharing of bibliographic databases and electronic journals. Database vendors like the *Institute for Scientific Information* and *Cambridge Scientific Abstracts* are promoting consortium approach to the use of their databases (e.g. *Web of Science*) among institutions with strong intranet and internet connectivity. Similar approach has been followed by journal publishers like *IEEE* and *Elsevier* in providing access to their electronic journals. This would not have been possible but for the availability of Internet. Internet has been used to provide nation-wide access to databases, for example the *ELSA (Electronic Library of South Africa)* in South Africa and *BIDS (Bath Information and Data Services)* in United Kingdom. Some of the popular international consortia arrangements which are in force are: *Ohio Link*; *HEAL Link*; *Virginia's VIVA*; *Georgia's Galileo*; *China's CALIS*, and *Hawaii Initiatives* for title-specific model.

Encouraged by the need to share the knowledge and experience of this emerging area, an International Coalition of Library Consortia (ICOLC) has been formed with Yale University Library as the coordinating center. ICOLC currently has a membership of 150 Library Consortia around the world. INDEST and FORSA consortia from India are the members of ICOLC (<http://www.library.yale.edu/consortia/>).

Consortia Initiatives in India

Some of the notable Indian initiatives on library resource sharing utilizing the internet technologies include:

- INDEST Consortium (<http://paniit.iitd.ac.in/indest/>)
- UGC INFONET (<http://web.inflibnet.ac.in/info/ugcinfonet/ugcinfonet.jsp>)
- FORSA Consortium (Astronomy and Astrophysics Libraries) (<http://www.iiap.res.in/library/forsa.html>)
- DAE Library Consortium (<http://www.tifr.res.in/~libws/>)
- CSIR Library Consortium (<http://www.niscair.res.in/ActivitiesandServices/MajorProjects/majproj.htm#ejournalconsortia>)
- ISRO Library Consortium
- IIM Library Consortium
- HELINET (Rajiv Gandhi University of Health Sciences, Karnataka) (<http://www.rguhs.ac.in/hn/newhell.htm>)
- ICICI Knowledge Park (<http://www.iciciknowledgepark.com/>)
- ICMR Library Consortium

Some of the prominent ongoing library consortia successfully operational in India are listed in Table 1.

Sl. No	Name	Participating Libraries	URL	Resources	Amount Rs. in Crores
1	UGC INFONET (INFLIBNET)	142 University Libraries	http://web.inflibnet.ac.in/info/ugcinfonet/ugcinfonet.jsp	1. 2000 E-Journals 2. Several Databases 3. JCCC	30
2	INDEST (MHRD)	120 (38 MHRD Institutes + 82 others)	http://paniit.iitd.ac.in/indest/	1. 10000 E-Journals 2. 16 Databases 3. JCCC	24
3	FORSA (Astronomy/ Astrophysics Libraries)	11	http://www.iiap.res.in/library/forsa.html	25 E-Journals, Nature Journals	Not provided
4	DAE	50	http://www.tifr.res.in/~libws/	1600 E-Journals	2
5	CSIR	40	http://www.niscair.res.in/ActivitiesandServices/MajorProjects/majproj.htm#ejournalconsortia	3100 E-Journals	25
6	ISRO	12	Not provided	1. 900 E-Journals 2. JCCC	Not provided
7	IIM	6	http://www.iimahd.ernet.in/ http://www.iimb.ernet.in/ http://www.iimcal.ac.in/ http://www.iimidr.ac.in/ http://www.iimk.ac.in/ http://www.iiml.ac.in/	1. 1050 E-Journals 2. 6000 Aggregated Titles 3. 12 databases 4. JCCC (4271 Journals)	5 (partly funded by INDEST)
8	HELINET (RGUHS, Karnataka)	26	http://www.rguhs.ac.in/hn/newhell.htm	1. 600 E-Journals 2. JCCC	2
9	ICICI Knowledge Park	7	http://www.iciciknowledgepark.com/	1. 500 E-Journals 2. JCCC	Not provided, funded by NISSAT
10	ICMR	24	http://www.jccc-icmr.informindia.co.in/about/about.asp	1. 693 E-Journals 2. JCCC (11800 Journals)	Not provided

Table 1. Major ongoing Library Consortia

1). A number of regional focused and city level consortia are slated to emerge having convinced at the success rates of the existing consortia in the country.

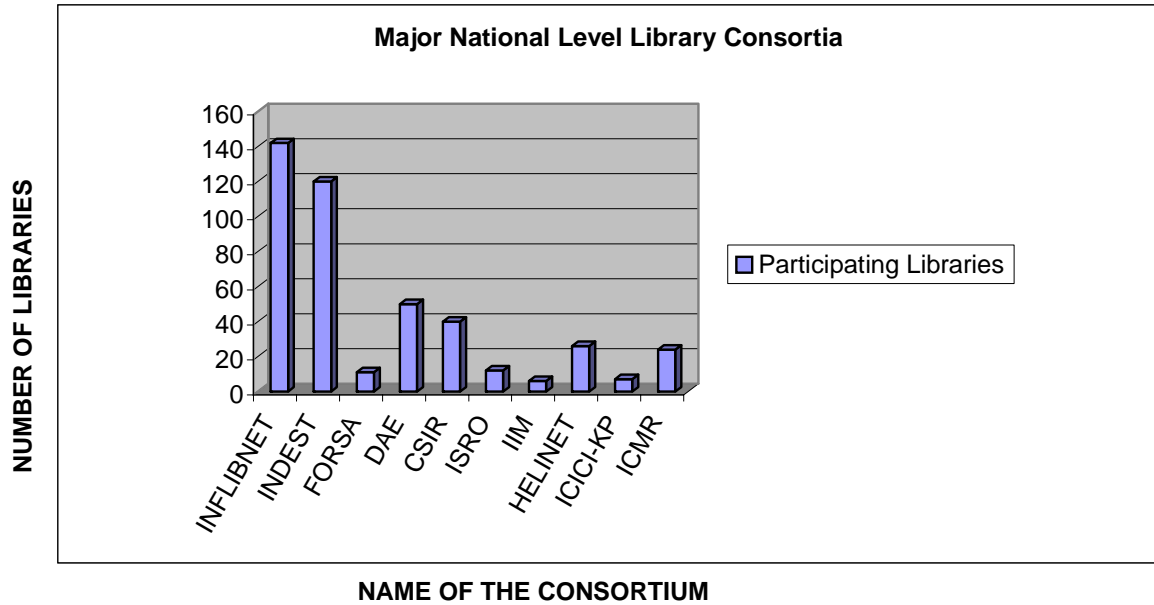


Fig.1. Membership base of major Library Consortia

INDEST Consortium is a welcome move from the Ministry of Human Resource Development of the Government of India and a number of other initiatives are taking place now in India all set to empower and enrich the libraries in the country. Similar is the case with the other library consortia in the country with regard to the increase in their electronic resources. It is heartening to note that the information resource enrichment being enjoyed by the participating libraries of the on going consortia in India is highly encouraging. The electronic journal base of major ongoing library consortia is illustrated in Fig. 2. This could be considered a role model for other libraries, parent organizations, and library networks in the country to emulate and accomplish.

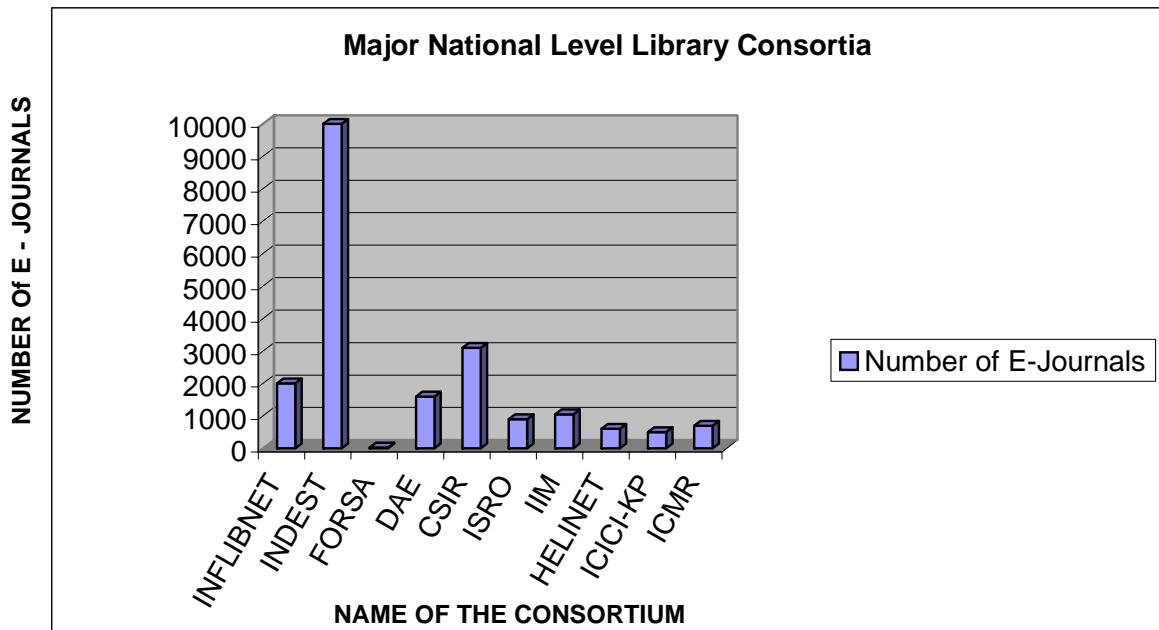


Fig.2. Journal Base of Major Library Consortia in India

Consortia Models

According to a study conducted during 2004 various consortia models are practiced in India and each of them have varied features (6).

They are:

i. Open consortia

This type of consortia is open ended and provides facility for the libraries to join and leave as they please. In this case, publishers define a minimum number of libraries for the consortium to take-off, at a specific rate per product. This type of consortia are generally driven by small homogeneous groups who have a need to cross-share the resources in a specific subject area. INDEST Consortium run by the Ministry of HRD, GOI, is an example to this.

ii. Closed Group Consortia

The closed group consortium stays exclusive within a defined group. This type of consortia emerges either by coalition, affiliation and collaboration among them (CSIR, DAE, IIM Consortium). Here the formation and operation of the consortia guidelines and its administration are fairly simple and easy.

iii. Centrally Funded Model

In this model, the very existence of the consortium will solely depend on the central funding agency. The strength of this model is that the financial responsibility of running the consortium is shouldered by the parent body. INDEST, UGC INFONET, CSIR, ICMR Consortia etc. are examples of this model.

iv. Shared-budget Model

In this model the participating libraries take the lead and form the consortium. IIM and FORSA are examples of this model. The operational aspects of the consortium especially the management of funds etc. are individually handled. Entering into an MoU for a better and strong footing is always recommended for this of this model.

v. National Consortium

This is a conceptual model or a framework as far as India is concerned, which is not being seriously attempted by any of the ongoing consortia in the country. There are some isolated efforts from UGC Infonet and INDEST in this regard, but they are yet to make any significant strides. National level licensing of information products could be achieved towards this end.

vi. Publisher Initiatives

In addition to the above, India has seen publisher initiated consortia models too, coming up in the recent years. The Emerald Full-Text Library published by the Emerald Publishing Group (formerly MCB University Press) is an example to this. Here, the publisher offered a deep discounted consortium price to the participating libraries on a national level. The pre-condition was that there should not be any drop in their print subscriptions. It is hoped that several such initiatives will be coming up from publishers' side in the near future.

Consortia Issues

The library consortium activity is a complex process, which involves the wholehearted support and concerted efforts of the librarians, their management and the publishers. They form an

important trio in the new scholarly information environment. There are umpteen number of issues relating to consortia like zeroing in and identifying the resources, uninterrupted online access, perpetual access to back issues, pricing, licensing, subscription payment, copyright and archival solutions etc. Planning and implementing the right kind of IT infrastructure is yet another pressing issue.

i. Resources Identification

Identifying the most suitable product which is agreed upon by all the members of the consortium is more or less a difficult proposition. This is mostly because each and every member will have their own wish list of information products and services, though the overlap between the products will be on the higher side in the case of an ideal homogeneous group.

ii. Technology Infrastructure

Long range planning and sourcing of the appropriate IT and Communication infrastructure conducive for proper delivery of information resources is pre-requisite for every participating library.

iii. Pricing Issues

As already discussed earlier, there is no standard practices or processes being followed by majority of the publishers of scholarly literature and hence this is a gray area all together. In most cases cost of the journals are out of reach of many of our libraries and only a consortia approach could provide some meaningful practical solution. Publishers are invited for negotiations and asked to offer their best prices to the consortia. Several methods of pricing are followed, but what is important is that finally the price offered by the publisher should be economically viable for the participating libraries. And it should also ensure uninterrupted and perpetual access to the resources.

iv. Access related issues

There are various access methods offered by publishers towards accessing their resources and it varies case to case. Access authentication could be User ID / Password based or IP based which are popular among them. Uninterrupted and hassle free access to the scholarly content is the ultimate objective of the consortium.

v. Licensing and Copyright issues

As against the print paradigm, the E-Journal subscriptions and access models allow only licensing of the content / product for a stipulated period of time which has several restrictions and bindings on the licensee. There are number of issues which are under debate between librarians, users and publishers which need international attention and solution.

vi. Archival Issues

This is an area which needs utmost attention and unfortunately this is yet to be attended to by the consortia in India. Long term preservation of the invaluable wealth of information being accumulated by the consortium is to be archived and preserved for posterity. As the technology is fast progressing and also getting obsolete almost at the same pace, it is high time that these costly information resources are care fully archived and preserved on a long tem basis.

i. Sustainability issues

Designing and launching a library consortium is perhaps the easier part when compared to its long term sustenance and longevity. The management and the members of the consortium have to strive hard in formulating and establishing robust models towards achieving the above goals.

ii. Usage and Usability Issues

The ROI (Return on Investment) of the consortium is measured in terms of the increased usage, usability of the costly information products which is ultimately reflected in the scientific productivity of the host institutes. It is the earnest efforts of the consortium, the management, the researchers and faculty and the librarians which determine the success or otherwise of any consortium.

Conclusion

We find that the library consortium activities in India are of recent origin and are fast evolving. At the time of writing this paper over 10 national level library consortia - though performance-wise at different levels of reach and richness - are live and operational in the country. As the consortium initiatives demand active involvement of the LIS professionals as well as the promoting / beneficiary institutions, it normally evolve and grow with hardships and bottlenecks. At times we find that the movement draws its strength even from its weaknesses, problems and from its own hard-learned lessons. It is also to be noted that E-Journal subscription itself is a complex and complicated process, which adds up problems to the consortium activity in multiple ways. Naturally there will be a host of issues and problems that keep haunting libraries involved in consortia activities. At the same token and more importantly, the consortium approach brings in numerous benefits to the participating libraries - a steep increase in the resource base at a nominally higher investment burden; ensuring uninterrupted access to the array of E-Journals; enabling perpetual access to the previously subscribed scholarly content for future; increasing the institutional intellectual capability and scientific productivity; opportunities for long term preservation of scholarly materials through state-of-art archiving strategies; and above all, a tit-for-tat check and balance opportunity for libraries towards the monopoly and the upper hand being exercised by the commercial publishing community for long.

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