E-journal Consortia for Academic Libraries

Sachin Y
[1]Library & Information Centre, National Institute of Mental Health & Neuro Sciences (NIMHANS)
Bangalore, India

Prasanna Kumara B. M
Library & Information Centre, New Horizon College of Engineering
Bangalore, India

ABSTRACT: *The higher education system in India is currently one of the largest systems in the world. Academic libraries play a most significant role in improving the quality of library services for the user community. Emergence of information and communication technologies and globalization of networks lead huge amount of Information Resources and Services available on the Web. The present day digital environment is 'Consortia' that is intended to share the resources through collaboration among the libraries. The library consortia has played a key role in giving cost effectiveness. Some initiatives are taken by the universities for accessing E-Journal through consortia. This paper focuses on the emergence consortia for academic libraries, consortia model, issues, benefits and constraints related to academic library.*

1. Introduction

Higher education in India contributes a major share to the overall education system and plays a vital role in the social and economic development of our nation. The demand for higher education in India will provide the largest opportunity in the world for education institutions to ensure India's progress in delivering high quality technical manpower. In India, higher education is imparted at various levels such as under graduate and post graduate research in specialized fields catering to various aspects of science and social sciences. Keeping in view The Government has constituted a various Commission to suggest plans measures to alleviate the problems that higher education sector is afflicted with and make India a Knowledge super power in the global economy.

The University Grant Commission of India is not only the fund grant giving agency in the country, but also responsible for coordinating, determining and maintaining the standards in institutions of higher education (Virmani, 2014). All India Council for Technical Education (AICTE), Indian Council for Agriculture Research (ICAR), Bar Council of India (BCI), National Council for

Teacher Education (NCTE) Rehabilitation Council of India (RCI), Medical Council of India (MCI), Pharmacy Council of India (PCI), Indian Nursing Council (INC), Dentist Council of India (DCI), Central Council of Homeopathy (CCH), the Central Council of Indian Medicine (CCIM) and such other regulatory bodies from time to time to accommodate these development and yet maintain quality students in higher education.

Information and Communication technologies are effecting revolutionary changes in the way the information is stored, retrieved, and disseminated. With the application of information technology and the advent of Web-based services, contents are now available to students on their desktop. In the modern information-based society, the faculty and student community has been demanding pinpointed, exhaustive and expeditious information. To cater the information needs of the scientists, libraries require facilitating accessibility to a variety of information resources particularly the digital information in addition to the print documents. The library and information professionals are facing the problem of satisfying the high degree of users' demands encompassing multidiscipline with the limited financial resources to procure the multidimensional formats of the documents. To solve this problem more effectively, the librarians have been urged to adopt the effective consortia.

Electronic information should be accessible, authoritative, reliable, accurate, and timely. Due to the needs of faculties and students for high-quality information, academic libraries have been early adopters of electronic resources to provide electronic information resources and services. E-journals are becoming vital to carry any meaning full research. The library and information professionals are facing the problem of satisfying the high degree of users' demands encompassing multidiscipline with the limited financial resources to procure the multidimensional formats of the documents (Moorthy, 2009). To solve this problem more effectively, the librarians have been urged to adopt the effective consortia. The present day digital environment is 'Consortia' that is intended to share the resources through collaboration within the member libraries.

For better co-operation and successful consortia among participant libraries they should adopt a consortia model (Goudar, 2004). Evolving consortia models should base on a number of factors including literacy levels of users, subject background of participating member libraries, infrastructure available including socio economic condition and federal structure of the country. The adopted model should absorb changing technologies, rapid obsolescence of resources and accommodate new resources. Usually consortia model contain an agreement by participants, promoters and adopters.

2. Concept of Consortia

In general consortia are an association of two or more individuals, companies, organizations or governments (or any combination of these entities) with the objective of participating in a common activity or pooling their resources for achieving a common goal (Singh, 2008). One of the libraries or agencies will work as the coordinator on behalf of all libraries to negotiate with publishers, take care of legal issues, etc. It allows publishers to sell their e-journals in big packages to several institutions at the same time, reaching out to more institutions than they ever had before**.**

Consortium is a Latin word, meaning 'partnership, association or society' and derives from consors 'partner', itself from con-'together' and sors 'fate', meaning owner of means or comrade (Oxford University Press, 2010). According to the Oxford University Press, consortium means a "temporary cooperation of a number of powers, companies, etc. for a common purpose. It is an association of similar type of organization/ institution who are engaged for producing and servicing the common things for providing services for a specific purpose of its users"

American Heritage Dictionary (1993) considered the term "a cooperative arrangement among groups or institutions. More straightforward description of 'library consortia' would be organizations of libraries formed to realize the benefits and opportunities of collaborative activity.

2.1 Definition of Consortia
Consortia may be defined as two or more institutions or organisations that have formally agreed to cooperate or consolidate certain functions to achieve mutual objectives. Consortia may be formed on local, regional, national on subject basis. Libraries all over the globe are coming together to form consortia taking advantages of the path breaking developments in information, communication and networking technologies with the objective to promote faster, better and cost-effective means of providing access to the information needed by the users.

(Arnold, 1999) editor of the Library consortia management journal, defines library consortium more broadly, according him

Library Consortia is "a generic term to indicate any group of libraries that are working together towards a common goal, whether to expand cooperation on traditional library services (such as collection development) or electronic information services. It is now used perhaps too broadly, and encompasses everything from formal legal entities to information groups that come together solely to achieve better pricing for purchasing electronic information.

A Library Consortia consists of a number of libraries, preferably with some homogeneous characteristics by subject, institutional affiliation, or affiliation to funding authorities that come together with an objective to do certain job collectively. When a library, university system, or Consortia, acquires a web based product, it essentially provides multiple copies since the product can be widely distributed to a very large customer base.

3. E Resources and Consortia

E Resources includes wide variety of materials e.g. e-journals, bibliographic databases, reviews published by scholarly societies, university presses, institutional and commercial publishers. The E-Journal has played a major role in the creation and transmission of knowledge as the primary medium of formal scholarly communication and has remained essentially unchanged in form and function for more than three centuries. Despite its benefits to science and scholarship, the paper journal system has been subject to much criticism due to mainly spiraling costs, lack of selectivity, problems with the peer review process and long publication delays. Print subscriptions still continue to dominate publishers' revenue.

The developments in computers and communication networks, especially World Wide Web have facilitated creation of alternative electronic forms of the conventional paper journal. Some of the major e-journal databases are Science Direct, EBSCO databases, Proquest, Kluwer online, Springer LINK, Wiley Inter science, IEEE Xplore, Institute of Physics, MCB Emerald Library, Cambridge Journals Online, Academic IDEAL, OCLC's First Search Service, UMI's Proquest, JSTOR, etc.

The Library Managers are required to cope up with the increasing demands of faculty, students and researchers against all odds like dwindling budget and decreasing staff. Librarians are forced to work together due to economic realities and technological possibilities paving the way for forming subscription clubs for e-journals, not just clubs but strategic alliances with broad based objectives. The consortia can be defined as a strategic alliance of institutions having common interest. The main aim of Consortia is to achieve what the members of the group cannot achieve individually. The developments in information retrieval system and faster access technologies have enabled the libraries to come together for licensing the information available in digital form.

4. Need for Library Consortia

The aim of Consortia is to achieve what the members of the group cannot achieve individually and to gain more with less investment. The emergence of consortia gives new opportunities for libraries to provide instant access to information. Through consortia, every member of the Consortia gets electronic access not only to the journals currently subscribed to but also to all the journals published by the publisher form archives. Some of the main needs of consortia are:

• Consortia will overcome the duplicate subscription for libraries.

• It is needed to address the requirement of large population.

• Improving the quality and standard of research at the local and national level.

• Greater resource sharing amongst academic libraries within a least possible time.

• Increase the cost benefit per subscription and remote the rational use of funds.

• Ensure continuous subscription to the periodicals subscribed.

• Develop technical capabilities of the staff in operating and using electronic databases.

5. Objectives of Library Consortia

The main objective of the Consortia is to provide access to qualitative e-resources including full-text and bibliographic databases

to academic libraries at a lower rates of subscription. The major objectives of the consortia are as follows

• To provide access to electronic resource to a large number of academic institution.

• To provide lower rates of subscription with most favourable terms and conditions.

• To improve effective article delivery service among the libraries.

• To promote use of ICT among students in teaching and learning in universities.

• To extend the benefit of Consortia to its associate members.

• To impart training to use of electronic resources with an aim to optimize their usage.

• To promote use of e-resources with gradual decrease in print subscription

• To promote resource sharing and inter-library co-operation amongst the participating universities.

• To evaluate the usage of the subscribed resources and to identify new resources that are required to be subscribed under consortia.

• To increase the research productivity of the institution both in terms of quality and quantity of publication and

• To bring qualitative change in teaching & learning and research & development with an aim to meet the ever growing challenges of globalization of higher education.

6. Issues Related to Consortia

Some of the major issues of the consortia are as follows:

• Selection of coordinating agency to deal on behalf of the entire group of participants and executing and monitoring the work.

• Identification of libraries interested in participating and agreeing to common terms and conditions.

• Identification of potential publishers to provide access under consortia purchase.

• Negotiating with publishers to get a commonly acceptable and affordable price.

• Identifying the necessary infrastructure for electronic access to resources.

• Identification and selection of databases to be acquired and hosted at one place (i.e., coordinating agency).

• Documentation and training to use consortia.

7. Consortia Initiatives for Academic Libraries in India

At present, the world-class institutions in India are mainly limited, most of the Indian colleges and universities lack in high end research facilities. Many libraries in India not geared up for accessing e-Journals due to various reasons including user ignorance, infrastructure and funds. While there is an urgent need for changing the mindset of librarians users and the administrators for subscribing to e-journals through consortia. Some initiatives are taken by IIMs, CSIR, IITs, IISc Medical Institutions for accessing E-Journal through consortia.

The major research and development organizations like CSIR, ISRO, DRDO, DAE, ICAR, ICMR, DBT etc spend annually a huge amount around Rs. 150 crores towards library acquisition. In spite of this, they are not in a position to maintain the subscription of core journals. Majority of the academic libraries except those of IITs and Central Universities are facing very serious financial crunch even to subscribe to bare minimum number of journals. These circumstances naturally force Indian universities and R&D organizations to form the consortia for accessing more and more e-journals.

There have been few attempts over the years facilitating resource sharing among Indian libraries, However it needs little more efforts in updating. Few city-based networks like ADINET, BONET, CALIBNET, DELNET, MYLIBNET and PUNENET and also

by the national level INFLIBNET are developments in Library co-operation. The DELNET provides access to good number of databases and union catalogues of both books and journals of good number of libraries. Some of the Indian Consortia Initiatives are listed below,

• **CeRA (Est. Year - 2007):** Consortia for e-Resources in Agriculture is established by National Agricultural Innovation Project (NAIP).

• **DRDO E-Journal Consortia (Est. Year - 2009):** The DRDO E-Journal Service came in the year 2009 covering 10 publishers and one service provider.

• **IIM's Consortia (Est. Year - 2000):** Indian Institutes Management have formed a Consortia & jointly approached the publishers of e-journals and databases in the area of Management, Social & Behavioral science source.

• **AICTE INDEST Consortia (Est. Year – 2003):** The "Indian National Digital Library in Engineering Sciences and Technology (INDEST) Consortia" was set up in 2003 by Ministry of HRD, Govt. Of India. Institutions including IISc, IITs, NITs, IIMs. Engineering colleges and technical departments in universities have joined the Consortia with financial support from the AICTE.

• **UGC Infonet Consortia (Est. Year – 2003): UGC-Infonet** was an ambitious programme of UGC to interlink all the Universities in the country with state-of-art technology.

• **NKRC (Est. Year – 2009):** The National Knowledge Resource Consortium (NKRC) is a network of libraries and information centres of 39 CSIR and 24 DST institutes.

• **HELINET (Est. Year – 2003):** HELINET stands for Health Science Library and Information Network conceived by the University and successfully implemented which is first of its kind in the country by the Rajiv Gandhi University of Health Sciences Karnataka.

8. Guidelines for Effective Consortia for Academic Libraries

The Consortia subscribes to electronic resources covering all major subject discipline being though in universities. The member institutions are provided differential access of these resources based on their needs and activity. The consortia should be develop based on needs, purpose, scope of the consortia, common goals, willingness of the targeted partners and projected outcome. Before starting one need to assess the strength and weakness of the existing products and type of access of the libraries proper guidelines are to be set in order to achieve the following advantages of consortia.

8.1 General Guidelines
• All documents should provide full-texts along with the table of contents.

• Database description should include information on subject scope.

• Consortia should be designed to allow user to become a proficient searcher.

• Provision of integrating different sources like periodicals, government reports, books etc.

• Consortia materials should be accessed via the Internet using a standard web browser.

8.2 Software Guidelines
• Single gateway & Metasearch engines for seamless access to information.

• Embedded links to be provide to access full texts, at publishers site, aggregator's site.

• Remote access facility be included at the time of consortia agreement.

• The training of both system staff and users is a part of consortia agreements.

• Usage Reports should be provided in the website.

8.3 Governance Guidelines

• It should have well written understanding of relationship between consortia & its member.

• Governance structure should be mention with level supported by coordinating committee at participating centres.

• Well defined by laws, Memorandum of Understanding, resource sharing agreement and strategic plans help for good governance.

• All electronic resources available through the Consortia should governed by license agreements.

• The terms and conditions for using the resources should spelled out in license agreements.

8.4 Guidelines for Selection of Resources

• In order to understand the collection base in universities, meetings of librarians should be taken in different parts of the country and their views and feedbacks is to be obtained.

• Priority with common core collection to all participated members.

• Keeping in view of diversity of academic programmes offered by various universities, attempt is to be made to subscribe the e-resources that are multi-disciplinary in nature with wide scope and coverage.

• Resources from scholarly societies, university presses and non-profit organisations will be preferred over commercial publishers.

• Preference for the Resources that is very important but highly cost-intensive.

• Evaluate the databases against the present criteria and important areas of need among the participant libraries.

• All e-resources were evaluated for their

> • Content
> • Coverage
> • Platform
> • Rates
> • Embargo Model
> • Pay-per-view model
> • Open access model

8.5 Subscription Guidelines

• Once the electronic resources proposed for subscription are identified, proposals are to be invited from the publishers of e-resources / their authorized representatives.

• Negotiation for subscription to e-resources should be done by a Committee that constituted by the Governing Body of central agency.

• The "Terms and Conditions of Subscription to E-resources" and "Major Points of Negotiations" is considered at the time of negotiating.

• Financial incentives as a cost-effective access with lower administration.

• Agreement on time-to-time changes and anticipated future directions

• While negotiating consortia should decide for better pricing, various issues like bundled e-journals + print, e-journals only, pay-per-view, concurrent users number of IPs, work station.

8.6 Other Guidelines

• Archiving guidelines for continued access ever after.

• Evaluation guidelines with librarian and user interaction.

• Statistical measures to view operated statistics through website and usage of databases.

• Information Literacy Guidelines to develop feedback materials for users.

9. Benefits of Consortia

The Consortia leads to cost effectiveness and better utilization of library resources. Libraries prefer digital collections for many reasons can be access from home or office. Weather the physical library is open or not the library can get usage statistics that are not available for print collections and digital collections save space and are relatively easy to maintain. There are hundreds of S&T journals available electronically, most of them by way of the Internet. Some of the benefits of the Consortia are listed below.

• Consortia is a solution to avoid duplication.

• The Consortia acts as a single window service for a large number of universities.

• Through consortia a lot of common subscriptions can be avoided.

• It improves the existing library services and reduces the subscription cost.

• Consortia lead to cost effectiveness of the library.

• The Consortia is offered better terms of use of electronic resources, which would not have been possible for any single institutions.

• Consortia lead to less pressure on space requirement for storing and managing print-based library resources.

• Moreover, all problems associated with print media such as their wear and tear, location, shelving, binding, organizing, etc. are not an issue for electronic resources.

• Access to a greater number of journal titles through the purchase of a greater volume of content.

• Libraries can have access to wide range of journals from one licence agreement.

• Consortia enhance the buying power of individual library.

• Helps to consolidate expertise and skills by sharing among consortia members.

• Avoid unnecessary maintenance of archives at all places and also back up facility.

10. Consortia Constraints Specific to Indian Libraries

Due to technological developments, electronic publishing of scholarly journals has given rise and Libraries even in the present situation prefer to own the materials, rather than accessing them from other libraries or a network. They do not think of increasing their information base by adding the item that is not available with other libraries. Some of the constraints of consortia to Indian Libraries are given below.

• The fear of losing an identity is another aspect. As they feel they have to follow the guidelines set for a group of libraries.

• Centralization of activities and services under a network is still not preferred or accepted by many libraries.

• Benefits gained through participation in consortia are hard to explain or convince the authorities, particularly in the beginning stage.

• Lack of a well-tested mechanism of transfer of document or information to build confidence in the end users, which requires timely delivery of required information in an efficient manner.

• There are several other barriers such as geographical, legal, administrative, etc,

• Lack of awareness about consortia & its benefits.

• Slow acceptance of e-resources by the users.

• Maintenance and balancing both physical and digital library.

• Rigid administrative, financial and auditing rules, Inadequate funds, Single point payment.

• Pay-Per-View not yet acceptable.

• Uncertainty about the persistence of digital resources.

• Lack of infrastructure for accessing electronic sources.

• Unreliable telecommunication links and insufficient bandwidth.

• Lack of appropriate bibliographic tools.

• Lack of trained personnel for handling new technologies.

11. Overcome the Barriers for Successful Consortia

How are none Number of factors that can contribute to the success of resource sharing among the libraries?

• Clear policy, adhering to the agreements and abiding by the guidelines and rules.

• Making adequate preparatory studies and analysis with clear objectives.

• Ensuring technical compatibility among participating libraries.

• Adequate arrangements for monitoring of services and feedback information.

• Compatibility, when it comes to consortia through the networks standards needs to be studied and adopted by all.

• There need to be mechanism to monitor the whole process and collect the feedback from time to time.

• Treat with equal with participating libraries, when the major decisions are taken at Consortia level and with staff members at the individual library level.

• Frequent meetings with participating libraries, reviewing various issues involved, can make the programme make consortia more successful.

• Conducting Training sessions to participant institutions.

• Improve technological assistance to participated institutions.

12. Conclusion

The library consortia help libraries to have cost effectiveness in subscribing to e resources. The whole world is moving towards electronic publishing and the cost of the electronic publishing is much lower than that of the print version. Consortia are achieving many common interests. Pay-per-view is not yet popular. Libraries and information providers must jointly develop and agree upon what constitutes an effective measure and efforts has to be setup by AICTE, UGC, IITs, IIMs, ICMR, and ICAR etc. Few librarians have taken up consortia initiatives to provide access to e-journals, which probably is the only way to satisfy increasing information requirements of vast number of Students and Researchers.

References

[1] Agarwal, P. (2007). Higher education in India: Growth, concerns and change agenda. *Higher Education Quarterly*, 61(2), 197-207.

[2] American Heritage Dictionaries. (1992). *The American Heritage Dictionary of the English Language* (3rd ed.). Houghton Miffin.

[3] Anasuya, M., Vasanth, N. (2012). Consortia Based E-resource Subscription: Initiatives in Karnataka. *International Journal of Information Dissemination and Technology*, 2 (1) 18-23.

[4] Andrea, L., Wadley. (1997). Marketing the public library service to the full-time employees' future directions. *Library Management*, 18 (5) 253-263.

[5] Arnold, H. (1999). Libraries, Consortia and Change Management. *Journal of Academic Librarianship*, 124-126.

[6] Baathuli Nfila, R., Darko-Ampem, K. (2002). Developments in academic library consortia from the 1960s through to 2000: a review of the literature. *Library Management*, 23(4/5) 203-212.

[7] Boock, Michael, H., Chau, May. (2007). The Use of Value Engineering in the Evaluation and Selection of Digitization Projects. *Evidence Based Library and Information Practice*, 2 (3) 76-86.

[8] Chand, P., Prakash, K., Satyabati, T., Chauhan, S. K. (2007). Access to scholarly literature in higher education institutions under INFLIBNET consortium.

[9] Goudar, I. R. N., Narayana, Poornima. (2004). Emerging pricing models for E Journals consortia and Indian initiatives, *In*: Proceedings of the International Conference on Digital Libraries (ICDL 2004), (p. 333-341). New Delhi.

[10] Janice, R. Lachance: (2006) Learning, community give library and information associations a bright future. *Library Management*, 27 (1/2) 6-13.

[11] Kapur, D., Mehta, P. B. (2004). Indian Higher Education Reform: from half-baked socialism to half-baked capitalism. Center for international development working paper, (103).

[12] Moorthy, A. L. (2009). DRDO E-Journals Consortium. *DESIDOC Journal of Library and Information Technology,* 29 (5) 18-23.

[13] Noor Shed Khan, David Bawden: (2005) Community informatics in libraries in Pakistan, *New library world*, 106, No. 1218/1219, 532-540.

[14] Oxford University Press. (2010). *Oxford Advance Learner's Dictionary.* London: Oxford University Press.

[15] Singh, K., Rao, Bhaskar. (2008). An overview of the Library Consortia in India. *Convention PLANNER* (p. 06-07). Nagaland: Nagaland University.

[16] Thornton, G. A. (2000). Impact of electronic resources on collection development, the roles of librarians, and library consortia. *Library trends*, 48 (4) 842-856.

[17] University Grants Commission (1988). Development of an Information and Library Network, Report of the Inter Agency Working Group. New Delhi: UGC. 488 p.

[18] Virmani, S. (2014). Higher Education in India: Challenges and outlook. *International Journal of Computing and Business Research,* 5(5).

[19] Retrieved from: http://www.inflibnet.ac.in/training/guide_dlc.pdf

[20] Retrieved from: https://en.wikipedia.org/wiki/Consortium