E-journal Consortium: Is it a Success Story Always?

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ABSTRACT

Libraries have experienced many transformations along with time. Scenario has further changed with the information explosion and advent of Internet and telecommunications technologies. Information seeking has become much more complex due to ever increasing amount of data, in both printed and electronic forms, and no single library is self-sufficient to purchase all the books/e-books, journals/e-journals and other library documents within their library budgets. Library consortium is one of the solutions to overcome this problem. However, due to ever increasing prices of journals, vendor dominated market, lack of competition, and for other reasons, question of whether consortium approach, some of the experiences in accessing e-journals through this approach, a viable alternative for journal's price hike or not? This paper is a case study of CSIR e-journal Consortium and discusses need for consortia, types, advantages and disadvantages of a consortium, problems faced by the consortiums and possible solutions for some of these problems.

Keywords: Consortium, e-journals, CSIR e-journal consortium, IISc, Indian Institute of Chemical Technology

1. INTRODUCTION

The word consortium has been derived from Latin, meaning association or partnership. In the language of law it means the partnership or relationship between a husband and wife. There are various definitions in different dictionaries on consortium. Broadly the meaning is same in the context of library; an e-journal consortium means the collaborative acquisition of access rights to electronic databases and journals. The aim of consortia is to achieve what the members of the group cannot achieve individually. Journals play a major role in the R&D but unfortunately the number and cost of journals are increasing at a galloping speed. Number of journals and their costs have increased by three-folds every 15 years and 226 per cent, respectively during the last 20 years in terms of dollars, which may be further compounded by currency conversion whereas the increase in library budget was only 110 per cent during the same period ¹. In another study by the Association of Research Libraries in USA, it was found that average CPI (Consumer Price Index) for US increased by 73 per cent during 1986-2004, but the research libraries expenditure for journals increased by 273 per cent during the same period². Also, there is an increase in number of research scholars, institutions and global competition. The estimated

number of STM (Science, Technology and Medicine) journals is about 25,000. Out of this 15,000 journals are peer-reviewed and 12,000 are in e-form³. All types of libraries/information centres are not in a position to subscribe all the information resources required by their users. Not even a single library can meet the thrust of knowledge required by all the readers from its stock of information to the full extent.

To solve this, libraries have started library cooperation, i.e. inter-library loan (ILL), resource sharing, and library consortium, etc. Though library consortium is a concept of 1960s, e-consortium is a nascent feature. For the past four centuries, dissemination of information was done through print media alone, now the electronic media has taken over this mean of communication. Basic purpose of consortia is sharing of resources, money, and manpower. In the digital context, it is the access to information rather than holding information. 'Collection building' concept has changed to 'Connection building' with the help of Information and Communication technologies (ICT). Access to the e-resources and the subscription amount is shared among the participating libraries. Significant price reduction can be achieved through consortium and individual libraries in the consortium will have collaborative acquisition of access

rights to databases and e-journals. Library consortias have become powerful negotiating parties and incorporating their own clauses in the contracts with the publishers and just no longer signing the standard contract texts provided by the publishers/vendors.

2. TYPES OF CONSORTIUM

There are many types of consortia. Formation of a particular type of consortium depends upon many factors. Broadly there are the following groups with different features³:

- (i) Open Consortium: In this type, libraries are free to join and leave as and when they please. Member libraries are usually homogeneous in nature and require cross-sharing of the resources in a specific subject area. For example, INDEST Consortium of MHRD, Government of India.
- (ii) Closed Consortium: As the name indicates, this type of consortium is formed by coalition, affiliation, and collaboration among exclusive member libraries. For example, CSIR, DAE, and IIM Consortia.
- (iii) Centrally-funded: In this type, a parent body or the coordinating agency will have the financial responsibility for running the consortium. For example, CSIR, INDEST, UGC-INFONET, and ICMR Consortia, etc.
- (iv) Shared Budget: In this type, management of funds and other aspects are handled individually by the member libraries. For example, IIM, and Forum for Resource Sharing in Astronomy and Astrophysis (FORSA).
- (v) Publishers' Initiative: Certain publishers are also encouraging consortium formation by giving a deep discount in prices to the member libraries. For example, Emeralds' Publishing Group.
- (vi) National Consortium: This is a model perceived at national level which includes member libraries from one country.
- (vii) International Consortium: The end of this model is international level.

3. MANAGING A CONSORTIUM

Any type of consortium requires a core committee or a negotiating body which acts as a bridge between the consortium members and the publisher/vendor to deal financial and legal aspects mainly. Usually an agreement will be signed between the publisher and consortium. These agreements are of standard nature and normally publisher oriented. Nowadays takeover among the publishers is a common feature. Keeping this in view, the contract with publishers must be carefully drafted/altered so that the interests consortium are fulfilled. Determinant of e-journals characteristics for like content. authenticity, equivalence to print, navigation characteristics, search features, and seamless movement to other related articles, etc., have to be addressed before signing the deal with the publishers/content providers. Therefore, committee/ negotiating body should scrutinise the various clauses of agreement for a win-win situation.

- Committee or the negotiating body should also take care of the issues like archival policy and provision of e-journal dump along with the software to retrieve it in case of termination of the agreement so that perpetual access to the e-journals is available for the subscribed period.
- 𝒥 Source of funding to meet the subscription costs.
- Infrastructure facilities like high speed Internet/ broadband, personal computers with accessories are minimum requirement to access the e-journals and other databases.
- ℁ Publisher will provide the members either IP- or Password-based access.
- ℜ Publisher/vendor will provide usage statistics to consortium members.
- ℜ Realignment of library structure, space, facilities, collection, services and skill upgradation of existing manpower are required for efficient management of a consortium.

4. ADVANTAGES OF A CONSORTIUM

- Main advantage of e-journal consortium is that it checks the space problem, shelving, binding, lending, and related aspects of member libraries.
- It can keep growing at a phenomenal rate, characterised by the update policy of the publishers and addition of dynamically and automatically generated content, which is very useful to the scientific community.
- ✗ It saves the time of the user since instant access will be available after every updating unlike the shipping time, missing issues, and mutilations. etc., which prevail in respect of print media.
- ✗ For publisher, it can save publishing and shipping costs; improved income stability, incremental

revenue, and greater visibility for his products.

- ✗ It is easy to assess the areas of interest of users so that efficient services can be provided by the concerned librarians through usage statistics given by the publisher or gathered through Intranet.
- X Consortium builds communication among different libraries and avoids duplication of core journals.
- ✗ Consortium provides different search facilities to retrieve the documents including cited journals and supporting information to make search more convenient.
- ✗ Consortium provides access to unsubscribed print materials and developing a union catalogue of participating libraries.
- ✗ Consortium provides high quality literature and faster document delivery service, i.e., it provides a wealth of relevant resources readily available and helps survive the array of challenges to have a meaningful presence in this digital era to its users.

5. DISADVANTAGES OF A CONSORTIUM

- ✗ One of the disadvantages of consortia is nonpayment of allotted portion of the cost by member libraries or abide by the decisions that were taken by the negotiating committee/body, in maintaining the committed print subscriptions, etc.
- ✗ It requires high initial investments among licensees towards infrastructure, internet connectivity, and other accessories.
- ℜ It requires training of staff and updating their skills from time to time.
- ℜ Problems like copyright/excess downloads from the publisher.
- Content provider/publisher combines both essential and non-essential journals as a package. Whereas in print collection, the selection is done by subject expert(s) and only journals of core area are subscribed. Therefore, measures have to be taken to avoid unwanted items and recall the most relevant items.

6. CONSORTIA INITIATIVES—INDIAN SCENARIO

UGC/INFLIBNET Initiative: University Grants Commission (UGC) is a statutory organisation and a national body for coordination, determination and maintaince of standards of university education (hhtp:// www.ugc.ac.in). UGC has taken up the big task called UGC-INFONET, which seeks to provide high speed internet connections, electronic access to professional literature, development of multimedia, and infrastructure to supplement the traditional teaching and learning.

INFormation and LIBrary NETwork an autonomous inter-university Centre (IUC) of the UGC, has taken the responsibility of creating infrastructure for sharing information among academic and R&D institutions (http:/ /www.inflibnet.ac.in) and is located at Gujarat university campus, Ahmadabad. INFLIBNET/UGC through its onepoint programme is trying to provide access to esubscription to all important journals for the entire university community. It is directed towards the modernisation of libraries and information centre's for information transfer and access by establishing a national network of libraries of the universities and institutions of high learning. It is mainly a cooperative effort in resource development and sharing at national level.

INDEST: Indian Digital Library in Engineering Science and Technology (INDEST) is a Consortium of all Indian institute of Technologies (IITs), Indian Institute of Science (IISc) and a few other institutions which include RECs, NITs, IIMs, etc., set up by the Ministry of Human Resource Development, Government of India with its headquarters at IIT Delhi. Differential access to electronic resources has been provided to various institutions depending on their nature of research activity and education. Category I denotes highest usage institutions which includes IITs and IISc, Category II indicates modest level of usage which includes NITs, ISM (Indian School of Mines), SLIET (Sant Longowal Institute of Engineering & Technology) and NERIST (North Eastern Regional Institute of Science and Technology), Category III indicates lowest usage which includes IIITs (Alahabad), and PEC (Chandigarh). There is one more category called Special Interest Group (SIG) which includes IIM's, NITIE (National Institute of Industrial Engineering), IIITM (Indian Institute of Information Technology & Management). In all, about 38 institutions have been included under these four categories.

FORSA: The Forum for Resource Sharing in Astronomy and Astrophysics is a consortium of Raman Research Institute (RRI), Indian Institute of Astrophysics (IIA), Tata Institute of Fundamental Research (TIFR), Inter-university Centre for Astronomy and Astrophysics (IUCAA), National Centre for Radio Astrophysics (NCRA), and Physical Research Laboratory (PRL). In this consortium, subscription for both print and electronic format is paid by the supplier. Each member maintains its own print subscription and by paying an additional 12 per cent of its print subscriptions can access the journals subscribed by other libraries electronically⁴. This consortium has successfully negotiated with publishers of Nature to provide access to its e-version at a price of almost onethird of the list price.

CSIR Consortium: The Council of Scientific and Industrial Research (CSIR), a public-funded organisation, is India's largest R&D organisation established in 1942 with a chain of 37 National laboratories and institutes. CSIR is carrying out the research work in various disciplines all over the country. There has been a constant decrease (~66 per cent) in the journal base of CSIR over the last decade, which necessitated its libraries to find out alternate solution to make available R&D information⁵.

As a first step, the Director General, CSIR, set up a study group in April 2001 to collect/study and compile information on the journals subscribed by the CSIR labs. After several deliberations the consortium project finally took shape as a Network Project under 10th Five Year Plan with a budget layout of Rs11.79 crores for the plan period 2002-2007 targeting to access 4500 e-journals. CSIR's National Institute of Science Communication and Information Resources (NISCAIR) was identified as the Coordinator for implementing the consortium, with a task force team to negotiate and finalise the agreements with the publishers. The Heads of the libraries of the participating labs were the Nodal Officers to implement the Consortium access to e-journals at their respective labs. CSIR e-Journal Consortium strengthens its library resources by pooling, sharing and providing electronic access services like e-journals and international databases to its scholars and scientists. The first step taken in this direction was on 10 June 2002 when CSIR signed an agreement with M/s Elsevier Science to access around 1500 world class e-journals⁶.

NISCAIR has coordinated well by constituting different Committee, committees like Core Negotiating Committees, etc., for effective implementation of the consortium. Price model was chosen to maintain the print collection of the individual institution libraries irrespective of the duplicate and triplicate subscriptions from the same publisher and paying an extra amount of 9 per cent of the print to ScienceDirect at the beginning of the project. This extra amount has varied subsequently in the following years based on effective negotiations by the concerned committees. Usage statistics is being provided by the publisher to the individual institutes for effective monitoring of the Consortium. Archival issues pertaining to past five years (minimum) are also being provided by the concerned publisher as per the agreement.

CSIR Consortium has proved to be a great success and its impact can be measured in terms of revenue savings, usage of e-journals in terms of downloads and contribution of articles in international journals, etc. Substantial revenue has been saved, and significant growth in number of papers and IF (Impact Factor) have been achieved. Quantitative as well as qualitative improvements have been achieved in the years following the access to e-journals through the Consortium. Continual and steep increase in the number of downloads has also been recorded⁵.

However, access to ScienceDirect was stopped in April 2008 as the agreement was not renewed between the CSIR Consortium and the publisher due to failure of negotiations with the regard to price hike by the publisher. The reasons for the failure in negotiations are described below:

6.1 Publishers' Context

The scenario of publishing is changing due to the advent of open access (OA) movement. Roger Clarke's study on the operational costs of refereed-journal publishing models confirmed that the cost of publishing an open access e-journal is inherently less than the cost of publishing a subscription-based e-journal. Commercial publishers have a hard time realising the economies because they are locked in expensive practices, including higher quality branding and marketing, more aggressive customer management, and costly content protection systems that offset them. It takes a commercial publisher about \$ 3400 to produce an article for an e-journal, while a nonprofit publisher could produce the equivalent article for about \$ 730. The study suggested that it is easier for a nonprofit association to flip its business model to OA in comparison of large commercial publisher7.

According to a market intelligence service, the top 10 STM publishers pulled in 53 per cent of the revenue in the \$16.1 billion periodicals market in 2006. In the same time period, five of the six journal publishers in the top 10-Elsevier, Springer, ACS, Wiley, and Blackwell-showed growth only in the single digit, ranging from 0.5 to 7.6 per cent. The slow growth reflects a fairly stagnant and saturated market. Elsevier is the dominant player in the STM world with market share of about three times that of its nearest competitor. Unhappy with profit growth (7.2 per cent in 2006), Elsevier started making changes. The company initiated an ambitious plan to cut \$ 2 million in costs for each of the next five years. In February 2008, Reed Elsevier CEO Crispin Davis announced that the company will sell Reed Business Information, which publishes trade journals like Library Journal and Publishers Weekly, and purchase ChoicePoint, a large personal data company. Davis said these moves are part of a company strategy to get out of traditional advertisingbased publishing with its slowing sales growth, and venture in the online information services with higher margins7.

6.2 CSIR Context

As scientific literature is exploding, publishing has become an increasingly profitable enterprise. The delirium to judge scientific output in number of publications is now being exploited by the publishers. The competition in the publishing world is fierce, with even old scientific societies turning to commercial publishers, to bring a degree of professionalism of producing and marketing their journals. As journals multiply and costs increase, libraries must worry about budgets and coverage. Problems of libraries in India are compounded by growing costs of sometimes maintaining both print and online subscriptions and issues related to perpetual electronic access to back files. Large publishing houses like Elsevier Science and Springer-Verlag are beginning to monopolise the world of science journals; a situation that promotes a seller's market⁸.

CSIR Consortium did not agreed to the price hike proposed by publisher and termed it as unreasonable and gave a counter proposal for consideration of the publisher. As there was no consensus between the two, accesses to ScienceDirect was stopped.

7. CURRENT SCENARIO: INDIAN INSTITUTE OF SCIENCE'S EXPERIENCE

To tackle the problem of monotonically increasing library budget, an interesting exercise was conducted at the Indian Institute of Science (IISc), Bangalore, which probably houses India's largest holding of science and engineering journals. To prune the library subscriptions, a survey was conducted and journals in which the institutional faculty did not published papers for few years, and which were not cited by institutional authors and also did not cite any papers emanating from the institution were listed. IISc could have saved Rupees one crore if subscriptions of these journals were stopped, and utilised this to subscribe more useful journals. Surprisingly when the list was circulated among the faculties, none agreed to drop a single journal⁸.

Researchers expect that the administration subscribe to all journals. Librarians also like to give access to all journals to researchers, and publishers too like to maximise their profit. But the efforts to contain bloating library budget lies on the administrator who cannot alter dynamics due to resistance from all quarters. As some of the top publishers are merging and increasingly becoming monopolistic, the pricing policies are likely to become more intransigent⁹. Large publishing houses like Elsevier Science and Springer-Verlag are beginning to monopolise the world of science journals; a situation that promotes a seller's market⁸.

8. CONCLUSION

From above discussion it is felt that there should be a concerted effort by the researchers and librarians in trimming the library budget, and judiciously use money for subscribing core journals so that more than 90 per cent of

the users' needs can be satisfied. Increased cooperation and document delivery services among the homogeneous libraries may help in achieving higher user satisfaction. With the available ICT and Internet, it is a simple task in the present context. Bundled packages and big deals from the publishers may be avoided and those journals, which satisfy to the highest degree of user needs, may only be subscribed. Formation of a National Consortium and collective and logical negotiation with the publishers for a win-win situation may be another alternative that can be suggested. OA initiative is also gaining nowadays and needs to be encouraged. Judging a researcher's output, other than publications in journals with high IF, by using a different scale which may logically estimate his contribution to science may be another alternative.

REFERENCES

- Chand, P.; Nishy, P. & Sen, I. Access to knowledge by Council of Scientific and Industrial Research (CSIR), India: A case study. *In* Proceedings of the International Conference on Digital Libraries (ICDL), 5-8 December 2006, New Delhi.
- 2. Association of Research Libraries. (http:// www.arl.org/sc/marketplace/jnlprices.shtml).
- 3. Arora, Jagdish; *et al.* Library consortia and resource sharing initiatives in India: A white paper. *In* Proceedings of the *HELINET Consortium*, Rajiv Gandhi University of Health Sciences, May 1 May 2004, Bangalore.
- 4. Pathak, S.K. Role of electronic journals in astronomy and astrophysics libraries in India: An overview of IUCAA Library. *In* Proceedings of the XX IASLIC National Seminar, 2002, Patiala.
- Chand, P. & Nishy, P. Strengthening R&D information systems through library consortium: A case of CSIR laboratories. *Annals Lib. Inform. Studies*, 2008, 55(3), 45-51.
- Varaprasad, S.J.D., *et al.* E-Journal access through library consortium: A case study of IICT, Hyderabad. *In* Proceedings of the National Seminar on Electronic Publications, Hyderabad, 2006.
- Van Orsdel; Lee, C. & Born, Kathleen. Periodicals price survey 2008: Embracing openness. *Library Journal*, 2008. (http://libraryjournal.com/article/ CA6547086.html)
- 8. Balaram, P. Science journals: Issues of access. *Current Science*, 2008, **94**(7), 837-38.
- 9. Giridhar, Madras. Scientific publishing: Rising cost of monopolies. *Current Science*, 2008, **95** (2), 163-64.