Organizing models of library consortia: forming sustainable participation among potential partners in India

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Libraries are constantly grappling with ever-escalating cost of scholarly resources. Price escalation in e-resource subscriptions coupled with budgetary constraints has serious impact on libraries across the globe. This paper critically examines the prevalent situations that have been leading to resource sharing; primarily emanated from library cooperatives, interlibrary loan, buying clubs; subsequently changed to utility services, site licensing, and ultimately the *Consortium* – an emerging toolkit for libraries to survive. The strategic alliances amongst libraries and growth of library consortia have been discussed. The implications of different consortia models to the Indian libraries are explained; which suggests for a sustainable consortia organization among potential partners. The paper also attempts to provide an insight into how consortia strategies can overcome an unending fiscal constraint, and to sustain the buying power in collection development for better access to greater resources.

Introduction

The globalization of information through technological innovations, leads to a great demand of scholarly resources and the concept of 'virtual library' is gaining momentum. In fact, emergence of Internet as a new media of information delivery has triggered proliferation of electronic resources, stimulating a new range of potential services in modern libraries[1]. It has wrought a dramatic change in accessing and transferring information and offering us a powerful means of managing information.

In-spite of great demands in accessing scholarly information, most of the libraries and information centres have been forced to reduce the number of subscriptions owing to budgetary constraints compounded by ever escalating cost of scholarly resources, and fluctuating foreign exchange rates. The expenditure on serials as a percentage of total expenditure on library materials has been increasing sharply, thus producing serious impact on online journal subscriptions. Since 1970s, the annual addition of volumes in university and research libraries remained largely constant even declined substantially[2]. For instance, over the decade of 1986 to 1995, American Research Libraries have spent approximately 124% more than they spent in 1986, but yet procured 7% fewer titles[3]. Indian scenario depicts a decline of around 15% foreign subscriptions during the period[4].

Studies have shown a remarkable gap between the estimated budget and price escalation in journal subscriptions. Several explanations are due in this regard. Peterson[5] regressed with the journal prices on a variety of independent variables. In addition, Chressanthis & Chressanthis[6] observed that many publishers behave as monopolists. However, the journals published by commercial publishers tend to cost more (make profits) than those published by non-profit organizations viz., society publications or house journals[7]. Libraries that have static budgets reduce subscriptions. On the other hand, to maintain their revenues, the publisher increases the subscription prices; which invariably further affects the library budget to a great extent. Such an iterative process ultimately terminates in a new equilibrium that is

characterized by significant erosion of total subscriptions[8].

Whatever be the cause, almost all libraries worldwide, are constantly grappling with ever-escalating cost of scholarly resources. They are searching for a solution to enhance the buying power by means of library cooperation, resource sharing network, site licensing, buying club, and presently the consortium.

Understanding library consortia

The term consortia is a plural form of consortium, derived from the Latin word in early 19th century for fellowship; meaning 'coming together of separate groups for a common purpose'. Homogenously it is used as, alliance, coalition, collaboration, cooperation, coordination, partnership, etc. According to Chartron[9], the term consortium emanated from the field of economics and refers to grouping together of different independent companies in order to bring the resources (financial or material) under a single managing body for joint performance of specific operations. Gradually, the idea became more relevant and practical for libraries, especially with the advent of information technologies; though the exact date of first use of the term 'library consortium' is not very clear. Indeed the concept of consortium as association or partnership has long been a tenet of librarianship; and it generally has been in terms of cooperation, collaboration, coordination amongst libraries for the purpose of sharing heaps of information resources[10]. However, the libraries have not used this particular term widely until 1960s.

A consortium is said to be 'a cooperative arrangement among groups or institutions or an association[11]'. According to Oxford English Dictionary, 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 or for providing services for a specific purpose of its users". It has also been defined as 'an agreement, combination, or group (as of companies) formed to undertake an enterprise beyond the resources of any one member[12]'. Arnold Hirshon (a celebrated author, the editor of *Library Consortium Management* journal, and executive director of NELINET) defined

library consortium more broadly. He stated that 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, and encompasses everything from formal legal entities to information groups that come together solely to achieve better pricing for purchasing electronic information"[13].

More straight forward proposition of library consortia can be an organization of libraries formed (either formally or informally) to realize the benefits and opportunities of collaborative activity. The consortia is a 'coming together of libraries having common interests and needs, to achieve a common goal that is beyond what an individual library could achieve on its own'[14].

It is therefore, a cooperative alliance or association of libraries to share the resources, so that the collective strength of the group advances the research and learning of its member constituents.

A consortium is indeed a complicated organization. It is an association, in the sense that is not commonly understood. It means a consortium is neither library association, although some associations of libraries engage in consortial activities; nor is a regional or state system of public libraries, although such systems may negotiate access to electronic resources on behalf of their constituent parts.

Invariably, a consortium (at its primary level) can be relatively informal cooperatives, founded just to realize economies of scale in purchasing. But in later stage; it becomes highly organized, centrally staffed, centrally funded organization with an intention to share the resources, and further engage in all manner of collaboration within the member libraries[15]. It has no entity, if there is no member to participate or no shared-subscription of common interest. Here the relationship between members is largely a financial one, and the success or failure depends on the homogeneity among the constituent members.

The aim of consortia is to achieve something that members of the group cannot achieve individually. Consortia reflect a real transformation from organizational self-sufficiency to collaborative resource sharing by the libraries. It enables paradigm shift from the concept of individual institution ownership to a collective access of distributed

network resources. In fact, a consortium is not just limited to realize the financial restraints of modern libraries, but expanding its agendas for action in multiple dimensions.

Growth of library consortia

Evidence of library cooperation goes back to 1880s, though the term 'consortium' was first used in library literature in the 1960s. Collaborative librarianship began in 1930s for administering interlibrary loans and resource sharing[16]. Despite the formation of large-scale consortia in 1960s and 1970s, significant bibliographic utilities and integrated library systems were formed that served to develop consortial activities[17]. The next wave of consortia growth took place in 1990s and early 2000 exploiting the advances in information technology. Allen and Hirshon[18] emphasized that IT is enabling a level of cooperation that is much broader and deeper than ever.

The formation of 'Consortium of Consortia' in February 1997; which in turn formed a larger group named as International Coalition of Library Consortia (ICOLC)[19] was a turning point. Gaur & Tripathi[20] stated that India is the second largest subscriber (after China) of consortia based library subscription of e-resources.

Over the last decade, consortia movement has begun to mature. Round-tables, conferences and online web-forum of consortia have come into being. Library consortia are reported to be 'squeezing better deals out of publishers for electronic licenses'[16].

Organizational models of library consortia

Individual scholars, professional bodies and librarians have studied various types of consortia to reinforce the spirit of cooperation. They realized the strategic cooperation in the same way as viewed by Allen & Hirshon[18], Patrick[21] and many others[22-30]. However, the large-publishers (even learned societies) follow a great variety licensing practices; thereby too many models of consortia have been developed and utilized successfully.

Therefore, large variety of library consortia have been persistent, which are organized along many different lines with plenty of models (either operational or notional); thus creating multiple provisions of cooperation among the potential partners sustainably for better access to greater resources. So, the various consortia models, both proposed & observed, and a few models that have been in operation in India are discussed (Fig. 1).

Proposed models

Sinclair Model

Michael Sinclair devised the typology of cooperative library system in 1973, which is still relevant (as cited in Gorman & Cullen, 2000a)[31]. He wrote that 'each participant in a cooperative venture wishes to gain advantage in proportion to the value of its inputs. If a member is less well off than before, the cooperative fails[32]. His typology remains a valuable guide even today that identified four useful cooperation activities among libraries, as follows.

Bilateral exchange (bi-nodal partnership) – a pair of libraries, exchange information and materials by means of an agreement;

Multilateral pooling (multi-nodal partnership) – it is an extension of bilateral exchange, in which a number of libraries contribute to a common collection to draw the services at an agreed condition;

Dual-service common-output (service partnership) – a library within a pair or a group would like to extend its' facilities and services (say cooperative OPAC) to produce more vibrant group output;

Service-center or facilitating participant (outsourcing partnership) – here an external organization (say an aggregator or network service provider, as third party) is engaged by the participating libraries to provide a common service.

Allen & Hirshon Model

Barbara Allen and Arnold Hirshon entails that each consortium as being at a point on a continuum predominantly based on the governance structure. Therefore the progression of values or elements of the consortium varying by minute degrees, whether it is a formal or informal, centralized or decentralized structure loosely or tightly knitted federations, multi-type or multi-sector networks, centrally funded statewide or nationwide consortia; thus he defined the points on the continuum. However this model focused on the governance and organization structure of the consortium, often supports centralized form with collaborative decisions and to be engaged in higher risk higher return initiatives. Allen & Hirshon[18]
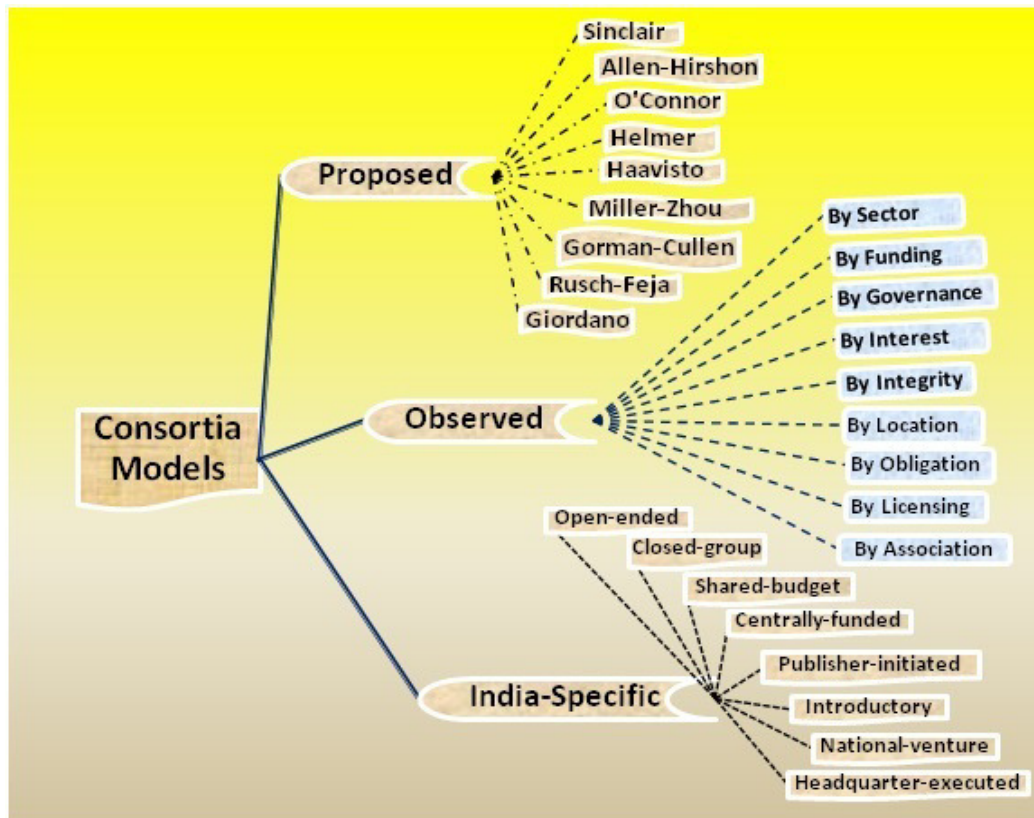
Fig. 1—Models of Consortia

recognize that groups may evolve and shift along the continuum as their mode of operation and the environment change.

O'Connor Model

Steve O'Connor identifies four types of consortia characterized by the source of funding. Therefore this model is predominantly based on how the consortia are funded[33-34].

Off the top – The members are drawn together for a common purpose by the availability of centrally provided funds; however, could be difficult to resist in absence of central funding. Good examples are OhioLink and GALILEO.

Get on with it – Describes initial funding by the government or any other funding agency to gear-up actions, then funding is taken over by the constituent members of the consortium. The CAUL/CEIRC in Australia is a prime example of this model, where Federal government provided initial establishment

cost (for two years). The consortium then needed to pick up the ongoing costs themselves.

Let's help ourselves – In this model, 'a company is established for providing library services or businesses, one of which becomes a negotiating arm of the organization'. Such a consortium is SOLINET in Atlanta.

Do it our way – This is almost analogous to the off-the-top model, but it differs only as it is nationally funded and focused. The Joint Information Systems Committee (JISC) in the UK is a successful example of this model.

Helmer Model

John F. Helmer recognized a good variety of consortia models in libraries based on the characteristics – a) formed by the government mandate, rather to survive from government obstacles; b) licenses electronic resources and services; c) offer also other services like shared catalogues, shared expertise, cooperative collection, and staff-training; d) has a legal status viz.

memoranda of understanding, by-laws, etc; e) has a central office with staffs and central funding or funding from a government agency[35].

Haavisto Model

Tuula Haavisto viewed the library licensing consortia in terms of how a consortium is managed and what needs to be looked at when entering into a consortial agreement. He also opined that a consortium can be managed by a member of the consortium, a new legal entity founded by the partners, and an outside agent i.e. subscription agent or alike[36].

Miller & Zhou Model

The model proposed by RG Miller and PX Zhou is popularly known as Gateway model. The Gateway Service Center was established at the University of Pittsburgh's Library (by a grant from the US Federal Institute of Museums and Library Services in 1998), has been serving as a model for global resource sharing; which inspired more libraries in China to join the partnership network to obtain materials in a wider variety of subject areas. This model typically describes three tiers consisting national, regional, and local nodes to share the resources (from unidirectional to reciprocal) amongst the libraries and information centres[37].

Gorman & Cullen Model

GE Gorman and Rowena Cullen suggested the ways in which Asian consortia and networks are conceptualized and developed. Apart from the Sinclair views, they proposed the following knowledge models viz., Networked library model, Cooperative network model, and Knowledge environmental model; to be applied in library and information networks in Asia to promote collaboration. According to their views, these models are hierarchical, moving from simpler to more complexes and from standalone to mutually-integrated[38]. Significantly, they also pointed out six principle reasons for cooperation in libraries.

Rusch-Feja Model

Diann Rusch-Feja identified four consortia models in Germany. These are a) state-determined regional consortia for libraries in higher educational institutions, b) regional multi-type consortia, c)

institutional consortia, and d) supra-regional, multi-institutional research library consortia[39]. Significantly, the author mentioned the importance of the advocacy role of the Information Communication Commission of the Joint Learned Societies, the German Research Foundation and the efforts of the Federal Ministry.

Giordano Model

Tommaso Giordano analyzed library cooperation in the way by which European consortia are established; from centralized to decentralized solutions, and well-organized to poorly organized consortia. He viewed that, "three principal consortia models seem to be establishing themselves: a centralized model (principally in the Nordic countries), a decentralized model (currently the most widespread), and a regional model (in some countries with decentralized political systems)"[40]. Thereafter, these three basic models (viz. national centralized, national decentralized and regional model) are extensively used in various library literatures.

Hormia-Poutanen et al[41] revisited the consortia to describe various solutions citing four countries in Europe. He explained that national centralized models are typical for the Nordic consortia; France is an example of a national decentralized model; and many Belgium universities (mostly the French and Flemish speaking) have each formed their own consortium, might be called as regional consortia. Later on Martek et al[42] also presented their views on consortia culture of European libraries in the same way, thereby simply followed the Giordano model.

Observed models

Based on the descriptions provided in various literatures and information displayed on the websites of predominant consortia initiatives, Dorner & Annear[43] have made their observation, as follows.

By sector

Consortia may be categorized by sector or type of participating organizations. Four groups identified are – a) *Single sector*: same type of libraries (say academic or public) come together to form a consortium, eg. Melbourne Asian Research Libraries Consortium (MARLC) in Australia; b) *Single sector with state or national library involvement*: consists of similar type of libraries along with the state or national library as a partner, for instance the Gauteng and Environs Library Consortium (GAELIC) in South

Africa; c) *Multi-sector*: may have all types of libraries and overlapping with other library sectors, even includes non-library partners; d) *Mega-consortium* i.e. consortium of consortia, such as ICOLC.

By Funding

Differentiating the source of funding, consortia may have three approaches – such as *internal funding* (predominantly funded by the members); *external funding* (typically by funding agency including governments, society council, granting authority, etc, but not by the members); and *combination of both* (i.e. funded by the members and outside agency as well).

By Governance

This model is based on how formal the consortia structures are- similar to the Allen & Hirshon model. Primarily this model is categorized either by *governance* or *organizational structure*. Governance structure may be highly informal, semi-formal, or formal (driven by centralized decision making); and organizational structure may have a central office with dedicated staffs, or without having a central office and no staff.

By Specific Interest

The consortia may be grouped by differentiating the predominant interest or any special interest of the members to come together. Such a model can be viewed on their own or subsets of the sector model. Commonality of interests may go through discipline or subject-area (say medical libraries consortia); apex or parent body (like UGC-Infonet); government initiatives (i.e. mandate for providing public access to government information); site licenses for electronic information (focused on obtaining online access); academic or research group (example FORSA consortium), etc.

A few other models of consortia have been observed.

By degree of integrity or affiliation

Consortia can also be modeled based on the intensity of cooperation among the constituent members or how the members are affiliated. There may be broad spectrum at one end (tightly-knitted stable association to retain long-term commitments) or can be loosely-affiliated buying clubs (a sharing to establish short term benefits) at the other end.

By geographical location

It is basically categorized by area or territory of activity covered by the consortia. It may have single location identity or cover multiple locations under the same umbrella otherwise nationwide coverage, even may consider beyond the country (i.e. multi-national or mega-consortia deals). In reverse, it can be treated as similar to local, provincial, regional, national, and even international level – often global.

By obligation or liability

Sometimes non-purchasing consortia also exists and work upon establishing proper coordination and partnership among members. Such a model is persistent simply because of being liable for something or may be obligatory to do the action. Large majority of the consortia are of shared purchasing in nature when compared with non-purchasing consortia. The SINTO consortium in UK is a good example for non-purchasing consortia, basically established for improving the quality of information services through co-operation, planning and partnership between the members.

By licensing or purchasing

This model is based on the terms and conditions of licensing at the time of purchasing consortium resources. These can be i) *Title-by-title purchase model:* where publisher offers a concessional rate for a selective list of print journal subscriptions, regarded as combined or set price; ii) *Print-plus model:* refers to the pricing of e-journals as an add-on or surcharge to the print-journal subscriptions, with no-print-cancellation clause to be quoted in the license; iii) *Electronic-plus model:* refers to the pricing of print-journals as an add-on (with deep discounts up to 80%) to the base price of e-journals that are being supplied to the library or consortium; iv) *Access-to-all model:* often called as all-you-can-eat model, where publishers offer an access to their total content for the price that a library might have paid for a limited number of print journals; v) *Pay-per-view model:* also known as pay-by-the-drink model, by which one may purchase blocks (selected groups or subject clusters) of journal articles or may pay only for delivery of the articles that are actually used, even the amount of downloads might be considered for payment.

By overseas association

In this model, an individual library or libraries of a nation get associated with library or libraries of other nation for sharing its resources and establish cooperation by means of collective agendas (includes staff-exchange programme). CAVAL and UNILINC are some of the examples of this consortia model. In reverse, libraries from different countries come together to form a consortium in broader range, or various consortium of multiple nations may establish a mega-deal like ICOLC.

India specific models

A variety of organizational models of library consortia have emerged in India based on their objectives, structures, member participants, funding sources, etc. A few of the prevalent categories that are being practiced amongst the libraries in India (represents a proto-type of the varieties) are given below.

Open ended model

It is open-ended i.e. aspiring libraries can join or leave the consortium, obviously within a defined framework or terms of references. This model suffers from sustainability problem; as it is a heterogeneous group, and members can quit from the consortium at any time as per their convenience.

Closed group model

This consortia model works on a defined group (those are having a common need to cross-share the resources) based on the homogeneity among the constituent members (commonality in affiliation); thereby being associated under defined guidelines to use the consortia services. Usually it imposes restriction to join beyond the group. However, the guidelines and administration of this model is fairly simple and easy. Example is the IIM Consortium.

Shared budget model

This type of consortia emerges with the proportional sharing of funds of the participating members, which is operated through MoU for better and strong understanding. So the participating libraries operate their budgets and take the lead to form a consortium, e.g. FORSA consortium.

Centrally funded model

In this model, the consortia fund is provided by the parent body or super-ordinate part (head office) of the organization. Therefore, the existence of the consortium solely depends on the central funding agency; eventually funding authority imposes regulation, often dictates on the governance of the consortium, such as the with the erstwhile UGC-InfoNet Consortium.

Publisher initiated model

Sometimes a publisher formally quotes a consortia price with attractive discounts for a set of libraries, obviously with certain preconditions (viz. without dropping of print subscriptions, etc.). Such initiatives are driven by eminent publishers and learned societies promoting bundles of e-resources through consortia. For instance Elsevier initiated a consortium for ScienceDirect subscription (by replacing overlapping titles) across the centers of Indian Statistical Institutes (ISI). Despite the above, publishers are often encouraged to offer further pricing options (especially for developing countries, like India) that provide increased value of purchasing power in typical situations. Such options like title-by-title purchase, pint-plus, electronic-plus, access-to-all or all-you-can-eat, and pay-per-view models are existent.

Introductory model

This model refers to a pricing practice adopted by the publishers (likewise vendors or exclusive agents or aggregators) to introduce newly launched e-resources at lower introductory cost (base price) or even free of cost. This is prevalent in developing countries (like India) for market penetration.

National venture model

Basically this is a national level initiative, by which members get access to subscribed e-resources under national licensing. Therefore, a national venture consortium can greatly reduce duplication of efforts and subscription of resources and also provide greater purchasing power.

Headquarter executed model

Such a model is driven by the headquarter of an organization or a group of institutions. Usually the head-office establishes the consortium along with financial liabilities. ISI library consortium is an example of this model**.**

Conclusion

There is no single best model for a library consortium. The governance, characteristics, and size of consortia are diverse. It could be run by an agency, a learned society, the government, or a national academic centre; even operated under the supervision of the national library. No consortium has all the characteristics of a particular model and the models are not mutually exclusive. In fact a consortium may evolve from one model to another.

The discussion on the different models reveals that consortia could develop better collective agenda to encourage collaborative librarianship. However, consortia purchasing model varies with the potentiality of partner libraries, publishers, and resources to be subscribed – eventually defines varying degree of collaborative success. Indeed each of the models has its own usefulness to meet the diverse needs of different consortia initiatives. With wider choices, greater satisfaction level can be achieved while setting-up a consortia licensing.

The consortia organizers must have systematic planning, suitable partners with long-term commitments, as well as sustainable strategies for a win-win situation.

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