



Proceedings of the
CONFERENCE ON
RECENT ADVANCES IN INFORMATION TECHNOLOGY
October 28-29, 1999

Library and Information Services

INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH
Kalpakkam 603 102 India

Co-sponsored by
Madras Library Association (Kalpakkam Chapter)

PAM-APF (Physics, Astronomy and Mathematics-Asia/Pacific Forum) : Network for Resource sharing and Consortium formation

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Abstract

PAM (Physics, Astrophysics and Mathematics) is one of the divisions of SLA (Special Libraries Association) which facilitates communication among Physics, Astronomy and Mathematics Information professionals in many ways, from providing the PAMnet listserv to organising meetings. PAM-APF is an extension to PAM, which includes the members from countries of the Asia-Pacific Region mainly. Library community always feels the urge to share their resources nationally and internationally. PAM-APF is a tool, which facilitates this sharing experience, and with the advent of Internet and Web technology, development of network has become easier. Though resource sharing is in an advanced stage, the concept of "Consortium" is still nascent in our country. PAM-APF can be a launching pad for this consortium concept in the immediate future. Not only does network become more active and live, but also the participants benefit economically from consortium formation.

Keywords : Library Networks, Resource Sharing, Library Consortium, PAM-APF

1. Introduction

Headquartered in Washington D.C., the Special Libraries Association (SLA) is an International Association representing the interests of nearly 15,000 information professionals in 60 countries. PAM (Physics, Astronomy and Mathematics) is one of the divisions of SLA which facilitates communication among Physics, Astronomy and Mathematics information professionals in many ways.

More information on SLA and PAM can be accessed at

<http://www.sla.org>

<http://pantheon.yale.edu/dstern/pamtop.html>

PAM-APF : Physics, Astronomy and Mathematics – Asia-Pacific Forum

<http://msowww.anu.edu.au/library/pam/project.htm>

PAM-APF was established in October 1998. The main aim of this project is to assist information professionals in the Asia/Pacific Region to exchange information and resources. Since publishers/vendors are partners in Information profession, this

regional project also aims to ensure that the publishers/vendors are aware of technological weaknesses in developing countries, especially in the Asia/Pacific Region. As a first step PAM-APF discussion list was launched in the beginning of 1999, and this has facilitated many librarians to participate in the online discussion, and currently there are 100 participants from 23 countries.

Subsequently, PAM-APF website was established in April 1999, and to make this website more interactive, the Chinese and Spanish versions are also introduced to help our colleagues in their respective regions.

1.1 Working together

The arrival of Internet and Information technology (IT) has provided great opportunities for librarians to increase their collaborative and co-operative partnership with other institutional librarians. The breath taking pace at which technology is evolving requires organizations to pay increasing attention to collaborative efforts. Nowhere is this more true than in libraries, where resource sharing is an axiom these days. PAM-APF is trying to promote these issues and in a recent Australian Library and Information Association (ALIA) conference held at Hobart, Tasmania, titled 'Strait to the future, 8th Asia-Pacific Specials', there was a focus session to discuss the aims of activities of PAM-APF in the future directions. (Regan & Louis, 1999). The issues that were discussed include,

- a) Establishment of the necessary infrastructure, hardware and software required to support the new electronic environment in libraries.
- b) Support for our colleagues in the form of training to handle the present situations in libraries.
- c) Encouragement and assistance to colleagues, especially from the developing countries to become aware, of various developments through Newsletters and electronic mail.
- d) Forming a consortium of libraries in the Asia/Pacific region.

Some of the participants expressed a need to provide translations for those who do not use English in their communication through web pages. Another issue highlighted was the use of Electronic Media For member libraries which have only phone and fax facilities but not electronic media a low-tech solution was suggested. To tackle this problem immediately, communication through newsletter was recommended. There was also a suggestion for a 'Twinning Programme' which could organise the distribution of "excess" or "duplicate" publications to member libraries as

a resource sharing gesture. The availability of such sources can be announced through Electronic mail and Newsletters. The traditional Inter-library loan facility between two or more libraries can be refocused to accommodate the Electronic mail and listservers for communication and faster access to resources. Also the use of Web technology has expanded access to information far beyond the capacity of any individual library, offering users global access to library catalogues and full-text resources, as a preliminary step in Digital Resource Sharing.

2. Networking of Astronomy Libraries and Resource Sharing in India

Information Technology has also a role to play in Indian Libraries, and it has changed the information seeking behaviour of scientists as well as librarians, in recent times. The need for better resource sharing was an essential motivation for eight astronomy libraries in India to have information network, called FORSA (Forum for Resource Sharing in Astronomy) (Vagiswari & Louis, 1998).

The participating libraries are

- 1 Indian Institute of Astrophysics (IIA)
2. Inter-University Center for Astronomy and Astrophysics Library (IUCAA)
- 3 National Centre for Radio Astrophysics Library (NCRA)
4. Nizamiah Observatory Library
5. Physical Research Laboratory Library (PRL)
- 6 Raman Research Institute Library (RRI)
7. Tata Institute of Fundamental Research Library (TIFR)
8. Uttar Pradesh State Observatory Library (UPSO)

Since in all these libraries, astronomy is one of the major research areas, the library collection includes books and journals in Astronomy and Astrophysics which supports the resource sharing activity among the scientists and researchers working in these institutes. In addition to books and journals they have other publications like Observatory Publications, Preprints, Astronomical Catalogues and Newsletters which are also shared.

Table 1 below gives the total collection and the services offered by the individual libraries. The table shows that four libraries have automated their library catalogues using the same library software called LIBSYS and two libraries use a software called SLIM. LIBSYS is a fully integrated multi-user library system

designed to run on a wide spectrum of hardware and software platforms and it can also import databases built on other software(e.g. SLIM). This is one of the important criteria which will make this networking feasible.

Table 1. Resources and services available at FORSA libraries

Library	Software	Coll.Books	Coll.Jour	Jnl.Sub.
IIA	LIBSYS 3.X	13,300	18,400	142
IUCAA	SLIM 2.0	10,000	4,000	150
NCRA	SLIM 1.1	5,400	3,000	104
NIZA.Obs.Lib.		5,340	3,995	10
PRL	LIBSYS 3.1	16,500	25,000	197
RRI	LIBSYS 3.X	19,613	23,273	137
TIFR	LIBSYS 3.2	55,000	56,000	656
UP State Obs.Lib.	Acquiring LIBSYS	8,273	8,061	76
Total		133,426	142,029	

From Table 1, it is evident that the collection of books and journals of all the libraries put together is not very large and will occupy less than 2 GB space to have an integrated digital database.

3. Networking Models

In recent times, it has become essential to attend to increasingly sophisticated information needs of the users and also to expand the value of the library within the organisation. FORSA has proposed to establish a network of its member libraries for utilisation of resources available in these libraries. Since this is still in the initial stages, three models were suggested for this networking.

- 1 Interconnecting all astronomy library homepages.
2. Creating an integrated library database.
- 3 Establishing connectivity using search-engine architecture.

These three models were discussed in length in an earlier presentation in one of the LISA conferences last year (Vagiswari & Louis,1998).

When the PAM-APF was being formed, we were invited to join this regional forum to have an extended information exchange facility not only within astronomy libraries, but also with the Physics, Mathematics and Computer Science Libraries. This was a good opportunity for us, to form a more formal forum within the country and also to represent ourselves in the Asia/Pacific regional forum. PAM-APF is a media for us to interact with like minded information professionals outside our country. (Louis,1999).Since we became a member of PAM-APF, we have benefited several times from other libraries outside the country, who were able to comply to our requests and information needs. To cite an example, in normal circumstances acquiring a photocopy from Australian National University Library (ANU),would require us to be a member of ANU, or a member of ALIA (Australian Libraries and Information Association),and make use of ALIA coupons to buy the article. In our case, we were provided this service without payment or coupons, since we are part of PAM-APF.This gave us a preferential treatment to get access to information faster and easier.

3.1 Resource Sharing Policies

Since, Resource Sharing is one of the main foci here, it is imperative to formulate some policies, when any network is established. These should be in the form of guidelines, to facilitate exchange of both conventional and electronic information among the members.

3.2 Interlibrary Loan

Traditionally, Interlibrary loans are through requisitions made by library users and the requisition policy takes care of the following, (Payne,1998),

- 1) The Patrons should request material only through their librarian.
- 2) Patrons are responsible for all other transactions, including renewals and overdue fines, upon receipt of the requested material.
- 3) User is also responsible for the accuracy of information on the request form to save the time of the library staff.
- 4) Only circulating materials (or photocopies that fall within copyright restrictions) can be requested.

In the case of digitised information, the co-operative policy is little different and has to be well defined to take care of the following points.

- 1) All the members of the network should follow certain standards while adding or deleting the records to the database.
- 2) Adoption of these standards means that each library has agreed to assume the responsibility for updating the records.
- 3) Care should be taken to avoid duplicate records.
- 4) Accurate copy holdings information should be maintained which will help to indicate the location and the call number of copies owned by member libraries.

While these guidelines help in building the digital database of documents, the member should also have some consensus in providing access to these electronic resources (Wade,1999).

- 1) Members of the networking libraries should strive to have a dedicated twenty-four computer facility to host the integrated database for the clients to have access remotely from any location.
- 2) The open-to-all resources in the database can be searched by the members, either with password or without password.
- 3) Electronic resources, especially the electronic journals for which a formal subscription is maintained, by the member library, has to be protected by the license and copyright law which the member has consented to while signing the agreement. The commercial databases also fall in this category, except in the case where the member libraries together subscribe to these databases jointly.

This kind of co-operative collection development is successful, since the materials can be physically accessed and delivered more expeditiously from member collections than from any other source. Members should agree to support access and delivery mechanisms at highest priority level, to have a meaningful resource sharing.

4. Library Consortium

Library consortia or resource-sharing networks have existed for a long time-particularly in U S A. But their main aim has moved from sharing of printed material to providing common access to electronic resources via the internet. Several types of consortia are available according to their objectives and the type of members constituting the consortia. The concept of library consortia came into existence when the shared cataloguing service established by OCLC started functioning effectively between regional networks comprising of several member institutions in U S A

(OCLC,1967). While forming a consortia, particular attention has been paid to the participating libraries, core programs, the reason for formation, funding etc. Similarities and differences are identified among the participating library collection and services to have a meaningful consortium.

A library consortium needs to have a clear, concise vision of what it wants to be, either a large or small one or a formal or informal one. This is essential in creating and maintaining a sustainable and beneficial partnership. This partnership should be able to adapt to new environmental pressures, both within the consortia and with the outside agencies like publishers and vendors. Additionally, the members need to be prepared to make sometimes difficult decisions, even where consensus cannot be reached. It is also essential to constantly review and reevaluate the aims and functions of consortium, which will help in focusing the need of a consortium (Allen & Hirshon,1995).

5. Benefits of Library Consortia

a) Resource Sharing

Promotion of reciprocal borrowing or collection sharing has been enhanced between members of a consortium with the help of Union Catalogues and Serial Listings. The lending policies and methods of requesting of the resources have to be formulated as a guidance for the consortia members.

b) Database Access

The number of databases both commercial and non-commercial have increased over the years. Many libraries currently have journals in both the paper and electronic versions. These digitised information of databases and journals are available in the network and accessed through Internet. The members of consortium, not only benefit from their own resources, they also can access the digital resources of other member libraries. To a large extent, this shared access on the network, helps in avoiding the duplication and also it represents a major cost saving for the participants.

c) Networking and Consortia Arrangements

Co-operation helps in negotiation with the various vendors/publishers. The members of a consortium have the clout and credibility for a better negotiating power with the publishers/vendors, which the members would not have individually. The publishers/vendors also have the incentive to plan a different and discounted marketing strategy, when it makes an offer to a consortium rather than to an

individual library. They also have the benefit of working with one group on behalf of many, not only in negotiation, but also for coordination and better customer service (Hunter, 1999).

Moreover, the networking concept helps in coordinating the maintenance of a consolidated holding of all the member libraries of a consortium at any given time. Interlibrary loan and resource sharing between any two libraries who are members of a non-formal organisation are not bound by any committed policy or guidelines, but the same is not true between members of a consortium. This subtle difference has been highlighted by the benefits gained by the members of the consortium.

There are some consortia, which are informal in their formation and function. International coalition of Library Consortia (ICOLC) is an Open Consortium arrangement offered by an informal consortium with over 60 member consortium organisations in the USA, Canada, UK, Australia, South Africa and Europe. This coalition primarily facilitates discussion among consortia on issues of common interest. All consortia anywhere in the world, who are in general agreement with the ICOLC statement of current perspective are eligible to join, this coalition (ICOLC,1997).

6. Marketing for Consortia

There are different types of library consortia functioning all over the world. Here we choose to focus on the formal and informal consortia, since almost all consortia can be categorised broadly under these two categories. Whenever the regional networks are formed, comprising of libraries, which are present in that region, location, and also discipline form the basis for the network. The same regional network can be a potential candidate for a consortium network. An existing regional network can be redesigned to have partners who are more serious about their resource sharing activity, and will also commit themselves for certain amount of funding. There are some areas of library collection and services, where funds are essential, like purchasing of online databases and also subscribing to electronic journals. Financial obligations of participants in this situation, is an important issue for discussion while forming a consortium.

Under certain circumstances, where cost of the online databases and e-journals are enormous, it is imperative for the member libraries, of a consortium, to negotiate

with the publisher/vendor for a fair deal. Different publishers, have different offers to make, depending on the type of consortia available (Hunter,1999). We have discussed below, few of the publishers' concept of a consortium and their offer to the libraries.

Academic Press, one of the reputed publishers and vendors has launched an offer called the APPEAL (Academic Press Print and Electronic Access License), to cater to library consortia needs. It aims to make licensing deals at country level, and will enlist international organisations, to find ways to license developing areas of the world to the extent possible. IOC (IDEAL Open Consortium) is an arrangement offered by Academic Press, to institutions, which are not already members of a consortium to get all the consortium benefits that AP has to offer. Specifically, an institution that makes an agreement with AP to join an IOC, and pays the fees involved receives an IDEAL Virtual Library Card (VLC) which provides World Wide Web access to the full compliment of 174 AP journals (IDEAL,1999). Though this offer looks very attractive, for libraries situated in India, which are continuously struggling to subscribe to optimum number of journals within a limited budget, spending an extra chunk of foreign exchange for accessing many journals, of only peripheral interest may not be a workable proposition. It should be noted that out of these 174 journals, only 21% are related to Physical and Engineering Sciences. However, 63% of the AP journals are devoted to Biomedical and Life Sciences, which is certainly advantageous to any library consortium which has members having interest in these disciplines.

Springer-Verlag is another publishing firm, which has a liaison office in India now. They have worked on the consortia concept, and have come out with a report, which has projected the consortia advantages in terms of buying electronic journals,

- a) All like minded institutions will highly benefit in forming a consortium.
- b) If the libraries form a consortium they will benefit by sharing the journals of other institutions which they do not subscribe to at an X cost (depends on publishers pricing policy) which is usually a small percentage of the print subscription.
- c) The institute will continue to get print editions for their subscriptions.
- d) Faculty members need not waste time in hunting for print editions in the library or check with other faculty members. Instead can view these from their own desks.
- e) Electronic journals offer supplementary materials like colour images, video, multimedia etc., which is not available in print, as they are more static

f) Enhanced abstracts will be shown not only as text but will also contain key illustrations.

All these benefits in terms of cost, has to be worked out depending on the pricing policy of the publisher, and the type of consortia formed (SPRINGER, 1999). Since On-line journals related to astronomy published by Springer are available free of charge, along with the print subscription, the FORSA forum has not yet made any attempts to bargain with Springer for access to Electronic journals. If at a later date Springer decides to offer discounts for online books and serials, as a part of their new marketing strategy, it would be worthwhile for a consortium consisting of PAM-APF members to take advantage of this offer.

At this juncture, we would like to mention about a consortium offer made by Kluwer publishers to our FORSA. Kluwer on-line journals are priced 20% more along with print journals. They have different pricing models, depending on the nature of the consortia. Initially, when FORSA negotiated with Kluwer for free access to on-line journals along with print subscription, they were willing to consider FORSA as an informal consortium, and agreed to give free access to Kluwer journals subscribed by the members of FORSA. (This facility is not offered to any other library in India). However there was a condition to which Kluwer wanted the members of FORSA to agree to. They wanted the members to give a formal assurance that all the FORSA libraries would not discontinue subscription to these Kluwer journals for next three years. However this was not agreeable to the members, since no library is sure of the journal titles they subscribe to every year, as this depends on the budget. When this was again discussed with Kluwer, they came out with another proposal where they said they would require at least a two year (1999-2000) commitment from the members. From there on one could work out a yearly renewal (KLUWER, 1999) (e-mail communication with Kluwer in Sep. 1999).

The members of FORSA have to come to some consensus, regarding this offer from Kluwer and will sign an agreement, which will entitle the FORSA members to access the Kluwer On-line journals free of cost.

Table 2. Cost-benefit for FORSA members as a Consortium

Libraries	No. of Kluver Journals Subscribed	Total Cost of Print Subscription(\$)	Total Cost of Print + Online (20%) (\$)	Total Cost saved (\$)
IIA	5	6502.50	7802.50	1300 00
IUCAA	5	6502.50	7802.50	1300.00
PRL	3	5391.50	6468.90	1077.40
UPSO	2	5691.50	6828.50	1137.00
TIFR	12	12,555.00	15065.40	2510.40

7. Consortia in India

In a recently concluded 'World Conference on Science', held at Budapest, the organisers paid more attention to broadening the agenda and shifting the focus to reflect changes in strategies for fostering Science in the Third World. Maurizio Laccarina, the chief organizer of the Budapest Conference, emphasised the question of how to help developing countries in the field of Science and Technology (Koenig,1999). If information professionals in India can take the clue from these deliberations, it is a fruitful exercise for them to highlight the need for using state-of-the art technology for information transfer for any improvement of Science and Technology in India. There is an urgent need for proper infrastructure in Indian libraries to meet the growing demand of the information technology, which will help in this endeavour.

We have several constraints at all levels, from budgeting to proper manpower training to cope with the IT demands. We, as information professionals, have the responsibility of understanding the situation and studying the needs of the user community, while designing any information service. It is for us to convince our administrators within the organisation, as well as at the Government level for a meaningful and co-operative information highway which can satisfy the users community at all levels. Even, in well established libraries with advanced technological facilities there is somehow a reluctance to invest in Information products like buying access to databases or subscribing to on-line journals. This

barrier has to be crossed if one has to make effective use of resources available Electronically. Though, initially these challenges may appear daunting and discouraging, the magnitude of the problems can be minimised if information professionals take initiative in acquiring proper training and mastering IT applications to the libraries. Networking and the Consortium support will be very useful in such situations, not only within the country, but also outside the country.

Some of the already existing library networks like INFLIBNET, NICNET, INDONET, SIRNET and the regional networks like DELNET, CALIBNET, MALIBNET,etc. can be converted into a library consortia, depending on their common interests and the purpose for which these networks are established (Ramesh & Sahu,1996). Ultimately,these networks turned consortia should work towards the transition to a digital future, which will help our country to have a partnership with other countries in forming a strong information network in the millennium.

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