

RESOURCE SHARING AND THE INFORMATION INTERFACE;
OPTIMISING THE USE OF BIBLIOGRAPHIC MATERIALS

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ABSTRACT

As the impact of financial stringency is felt upon library collections it becomes increasingly important to develop intermediaries between those with the need for information and the information that is, for one reason or another, inaccessible to them. One solution to the problem is the encouragement of local retrieval centres whose mandate is to act as an interface between users and processors of information.

PARTAGE DE RESSOURCES
SUPERFICIE DU DOMAINE D'INFORMATION
OPTOMALISER L'USAGE DE MATERIAUX BIBLIOGRAPHIQUES

RESUME

Au fur et à mesure que le resserement financier affecte les bibliothèques, la nécessité de développer des intermédiaires entre les personnes ayant un besoin d'information et l'information qui est accessible devient indispensable. Une solution à ce problème est l'encouragement aux centres qui ont les systèmes pour relever l'information afin que celle-ci soit disponible pour tous et chacun.

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Financial stringency is hitting all of us; as funding becomes harder to find we are looking for ways to share resources and hence share costs. One of the prime requirements for sharing resources is that the participants in the arrangement must know what is available elsewhere in the network. This paper examines an aspect of this "need to know" -- the part that a small local retrieval centre and an information specialist can play in a company or organisation as a source of resource information. Other papers at this conference discuss advances in telecommunications that are making it easier and cheaper to transfer information but are also bringing a much larger body of knowledge to the researchers' attention hence increasing their expectations and spreading their network of colleagues further and further afield.

Various alternatives to building an in-house collection exist, and all are being improved and becoming more attractive as advances in technology make communication between network participants easier and more comprehensive. These alternatives include:

- regional networks of publicly funded libraries which have a mandate to serve all users
- consortia of special libraries with like interests who develop co-operative collection policies and share resources
- networks based on a large resource collection and smaller related collections whose collections may be complementary or based simply on the need to know what is available elsewhere
- librarians and information specialists without a library whose function is to know what is available where and to bring users to the appropriate resources and vice versa

Most networks combine elements of all these types. Figure 1 represents in schematic form the manner in which a resource sharing network may be expected to evolve, from the purely local to the national level. Also depicted are the links between information-based services and the library or document delivery network.

The relationships outlined below are intended to be descriptive rather than prescriptive. The prime requirements of any information system are that it be simple, economic, flexible and adaptive. It is likely to be pluralistic; given the political environment there is little likelihood (nor is it desirable) that a single monolithic centralized system could be imposed.

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Bhagat (1977) suggests that the information dissemination network should provide incentives for the communication of knowledge by:

- providing review mechanisms for screening irrelevant information
- reducing ambiguity to users by careful indexing
- being flexible and adaptive to different users needs
- being efficient by taking advantage of economies of scale
- avoiding duplication and insuring compatibility
- being innovative in applying new technology
- being sufficiently stable and standardized to allow the user to understand and employ the system effectively

It is apparent that the above list combines elements that are of concern to the user, the processor and the supplier of information. This paper considers resource sharing in the context of the retrieval centre as interface between users and resources.

The Information Retrieval Centre

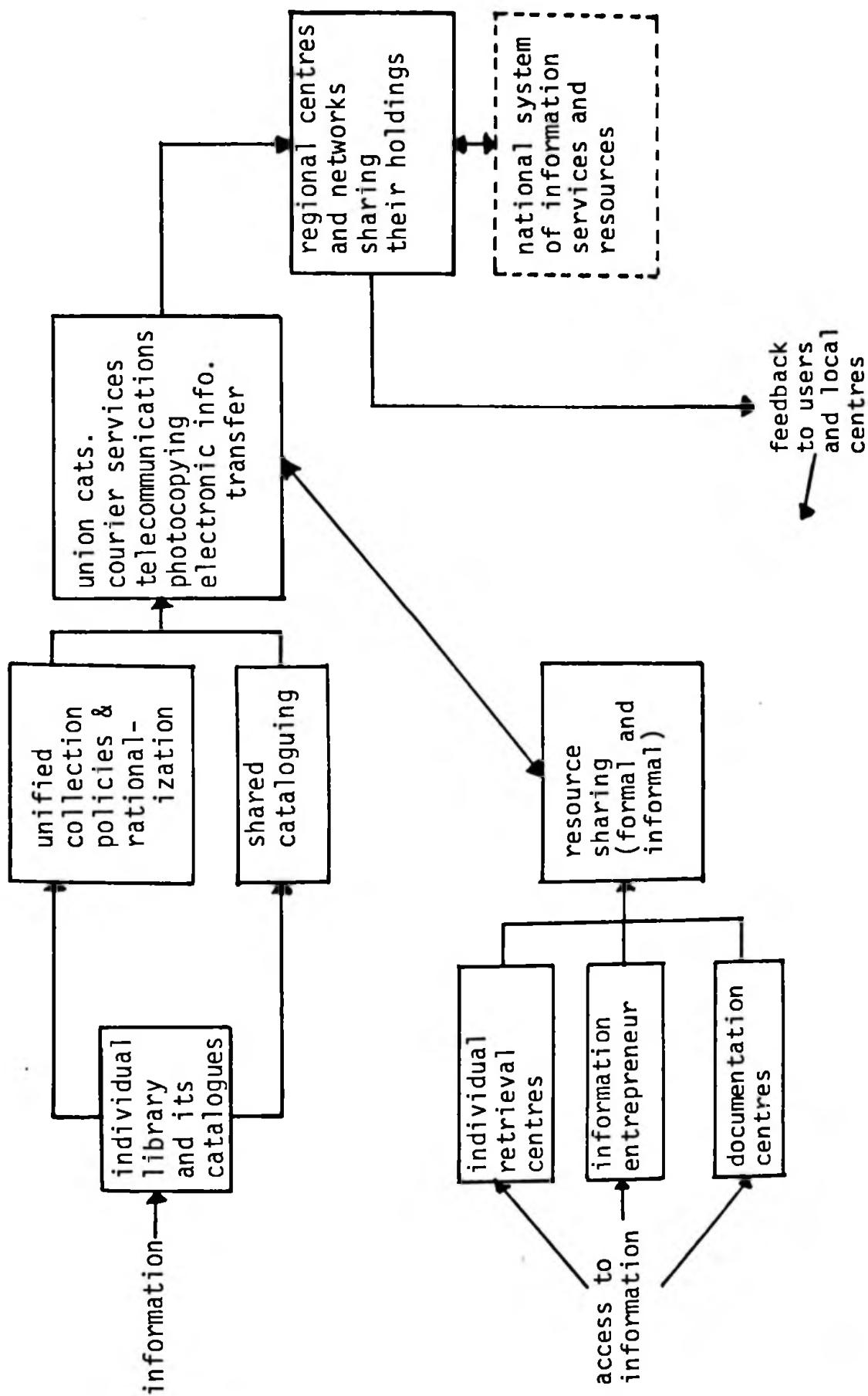
The user is expected to make his primary contact with the network at the local retrieval centre, whose function is to analyse the user's needs. A three-way interactive dialogue results between the user, the centre and the services and resources available through the network. The information specialist, therefore, must focus on both information and document delivery by providing the incentives listed above in addition to seeking out specific users' needs; providing bibliographic services and moving information to potential users; developing a collection and knowledge of tools, resources and people available; being mobile and flexible in order to obtain materials and respond to urgent requests; and by integrating the information centre into the organisation so that departments are crosslinked and materials move easily from one to another.

In order to perform these services the information specialist must be backed up by accessible local resource collections; a user group that is either mobile (e.g. students) or whose work is such that they are willing to accept a reasonable turn-around time for document delivery; and a collection of reference tools enabling the centre to "plug into" the networks available.

The development of the local reference collection should centre around the following types of publications and services though their

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FIGURE 1 - The Links Between Information and Access to Information.



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form and format is likely to change with the evolution of communications technology:

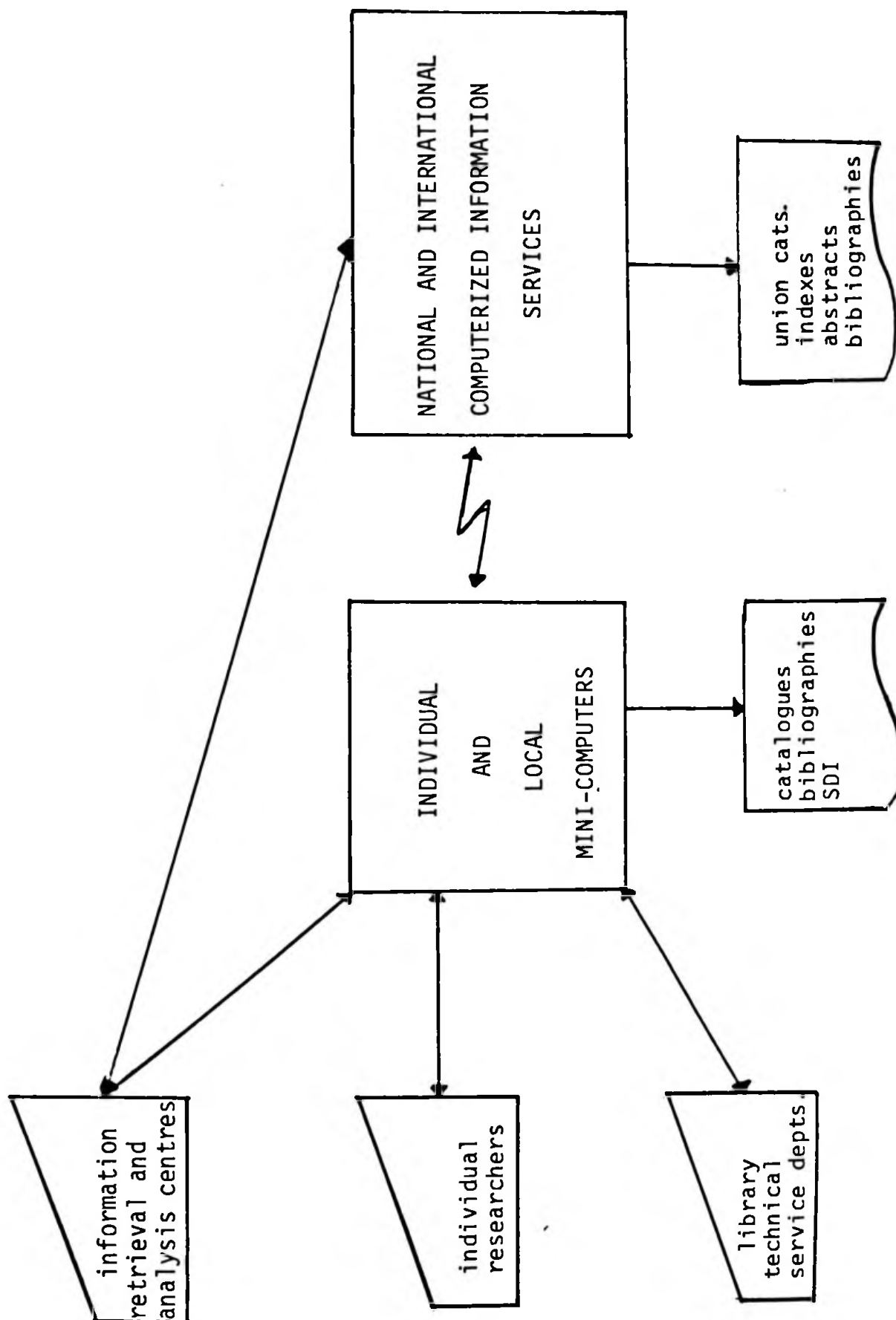
- on-line bibliographic services which can be used on a "pay as you go" basis
- union lists of serials devoted to specific topics and disciplines, particular indexing services, or particular regions
- directories of libraries and information centres. Regional, disciplinary and form directories are all useful and subject access to these directories is essential
- serials lists and accession lists from other libraries and resource collections in the area of interest
- specialised in-house abstracting and indexing services
- catalogues of libraries, especially the COM products of computerised catalogue production
- news letters, information bulletins, annual reports and brochures from research operations and co-ordinating organisations which are sources of bibliographies, information on new publications, research in progress and who has what
- book trade publications
- telephone directories, both regional and organisational
- almanacs and government yearbooks which are sources of information on specialised agencies, their services and personnel
- specialised bibliographies which are sometimes published separately but are often found in journals.

Networks

Individual retrieval centres are linked together, by formal or informal arrangement, into resource-sharing networks. Formal in this sense implies that some form of protocol for information exchange exists, whereas an informal arrangement may consist of an awareness at one centre of other resources and services that can be exploited on behalf of users. The network need not be restricted geographically -- although in practice this may prove to be the case -- its components could be widely dispersed with their only common bond an interest in a given subject area. Since the primary focus is information about

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FIGURE 2 - Distributed Information Processing



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resources rather than the resources themselves, and as communications become faster and more efficient, distance is no longer an inhibiting factor.

In Figure 1 we have indicated the links that exist between the "information" networks and the "access to information" networks. It is now quite feasible for the retrieval centre to house the entire catalogue -- or a subset of the catalogue -- of a large library or library network. By virtue of its interconnecting links the retrieval centre is able to perform comprehensive searches of a wide variety of suppliers, a facility that has been available only in relatively recent times and one that is still not fully appreciated. The ultimate user, therefore, may never need to travel further than his local retrieval centre. The corollary of this is that there will be an increasing demand for fast, efficient delivery systems.

There is an analogy between the arrangement of retrieval centres clustered around larger resource centres and current trends in data processing where some of the preliminary processing is done on a local mini-computer while the main storage and processing of information is done at a remote central computer. This has the advantage of freeing local centres for specialised retrieval tasks that they are well suited to perform while relying on backup by the central resource collection which can concentrate on the organisation and distribution of its resource and location information. (Figure 2)

Conclusion

Until relatively recently only the larger institutions have been able to deploy the technical and financial resources necessary to apply advanced technology to their operations. The techniques that have evolved are now widely disseminated and are available to any retrieval centre, small or large. There is reason to believe that it is at this level that future developments in information technology which are discussed in other papers will have the greatest impact, as techniques of storing and transmitting information evolve from paper-based systems to a totally electronic environment.

In the past the idea of networking has generally been confined to consortia of large libraries, we envisage retrieval centres and entrepreneurs along with small special libraries becoming the primary contact point for users and in effect the interface between the users and the resources in the information network.

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