49588

UNITED NATIONS
ECONOMIC AND SOCIAL COUNCIL

ECONOMIC COMMISSION FOR AFRICA

African Regional Symposium on
Telematics for Development

Addis Ababa, Ethiopia
3-7 April 1995

THE SOUTH AFRICAN BIBLIOGRAPHIC AND INFORMATION NETWORK
(SABINET) AS A MODEL FOR LIBRARY
AND INFORMATION RESOURCE SHARING

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NEED FOR LIBRARY AND INFORMATION SERVICE NETWORKS

Since the early days of computerisation, library and information services (LIS) have been putting it to use to improve the services of their users. The advent of on-line computer networks has promoted the development of library co-operatives into more formalised library and information networks on a regional or national basis. The following are the main applications for which these networks have been used:

Cataloguing and acquisitions

Centralised computerised cataloguing systems for libraries were originally developed in the United States at a time when library staff with the necessary language and subject skills was difficult to come by. The objective was to catalogue the books once only for use by many libraries. Later on these systems also supported acquisition procedures, often on a centralised basis, particularly for public libraries.

Bibliographical information

The databases for the above activities relied heavily on data from national and other comprehensive bibliographies such as the British National Bibliography and Library of Congress cataloguing, when these were made available in digitised form. Because of their comprehensiveness they lend themselves also to the wider information function for bibliographical verification and identification of publications by specific authors or of specific subjects. This facility was useful for both library staff and library users.

Joint catalogues

As a result of co-operative cataloguing functions of the networks

their databases automatically developed into joint or union catalogues, indicating the holdings of the member libraries. Specific efforts were later undertaken also to add information for retrospective holdings from the time before computerisation.

Interlending and document delivery

On the basis of the facility to identify publications which one library's users might require and not have available locally in another library, systems were developed to quickly transfer requests for these items to the holding library for interlibrary loan and to administer the loan transactions.

Resource sharing

Libraries never have had sufficient funds to buy all the publications required by their clients. On the other hand almost all libraries, and particularly research libraries, buy publications which are seldom or never used. The LIS network provides the opportunity for eliminating unnecessary duplication of purchases of the same titles by the libraries in the system. Available money can in this way be put to better use to buy publications which otherwise could not be afforded.

Information services

More specialised on-line information services, mainly for specific subject areas, have in time become available. Many of them were developed as indexes to journals and/or monographs and other serial publications. Others provide access to financial and other data. Most library and information systems have now started to also make this kind of information from relevant database services available to their users on their own networks.

SABINET INVESTIGATION

South Africa, like most countries in the developing world with limited resources, is faced with the problem of providing adequate information for development. During the late 1970s the National Library Advisory Council decided to investigate the possibility of a comprehensive library network to maximise access to the existing information resources. The study, which was done in close co-operation with the South African library profession, indicated amongst others the most important needs of the major thirty libraries as follows:

-       better management of information

-     Information sources
-     Finance

in the library and information fields by making available joint computer and data transmission facilities.

SABINET TODAY

As a result of the investigations SABINET was founded in 1983. According to Zaaiman (3), it arrived into a well-prepared library community, which had helped extensively and intensively to give form to SABINET. Libraries had looked forward to its creation with high expectations. A number of libraries delayed their own computerisation until SABINET was founded. The fact that 40 members immediately joined the new body, shows how eager libraries were to co-operate in using SABINET's national facilities and services. SABINET thus provided a system by which libraries could satisfy their already existing desire to co-operate and computerise.

The acceptance of SABINET was largely due to the intensive investigations that preceded it. This surely is the project that has been best researched in the library history of South Africa. The circumstances and needs of libraries were thoroughly understood.

One of the important but perhaps unrealised influences of SABINET must lie in the formative effect exerted on the thinking of many librarians by the high scientific standards maintained by the research teams during the various investigations that preceded SABINET. These standards were tightened as the investigations proceeded and probably provided many librarians with their first practical experience of the nature and demands of high-level research.

It may be concluded that SABINET strongly and beneficially influences resource sharing in South Africa. The co-operative use of the national bookstock, of a central computer and highly skilled computer personnel, and of specially developed computer programmes enables each library to function truly as a node in the national library system. The aim remains that South Africa should have only one library - consisting of all its libraries.

SABINET's present services have been recently summarised as follows: (2)

The bibliographic descriptions in the main database are standardised according to a format known as SAMARC. SAMARC (South African Machine Readable Cataloguing) is a method of representing bibliographic information in a format which is computer-readable. Each element in the entry (for example the author and title) can be recognised by the computer

- co-operative acquisitions
- decrease cataloguing costs
- decentralise cataloguing information
- increasing need for information
- obtain specific computer knowledge
- eliminate limitation of card catalogues
- improve bibliographical/information service

The study resulted in an extensive report with recommendations for the establishment of a South African Bibliographic and Information Network (SABINET). (1)

The Minister of National Education approved the formation of a South African Bibliographic and Information Network (SABINET) on condition that prospective participants investigate all aspects of planning in detail. The understanding was that the State would assist in establishing SABINET during its initial years by means of a gradually diminishing subsidy, and that participants should assume responsibility for the balance. After ten years SABINET should be able to maintain itself. (4)

The Department of National Education convened a meeting of all interested parties on 28 February 1983, with a view to confirm that participants agreed with the planned approaches and were prepared to participate in SABINET on the proposed basis.

Six information meetings were organized in all the major centres in South Africa during November 1982. At that stage, present planning with regard to the implementation, functioning and financing of SABINET was put before potential members of the network.

Reaction at the meetings was generally very positive. A strong need for the implementation of such a network was expressed, and there was general satisfaction with the manner in which the planning was being approached. There were problems in some individual areas, and after consideration the original proposals were amended in certain respects.

The aim of SABINET was formulated as follows:

To create a national infrastructure and to render services through which problems, experienced by library and information services (or related institutions) on local and national level, but which cannot be remedied by the individual organisations, can be solved through resource sharing, eventually leading to an advancement of culture in its broadest sense and optimal utilisation of:

- Manpower

program and consequently manipulated in various ways.

The South African co-operative library database (SACD)

SABINET's main database is known as the *South African co-operative library database (SACD)*. This is compiled jointly by SABINET and participating members; in other words, both SABINET and members add bibliographic descriptions to the database. SABINET adds entries by incorporating bibliographic descriptions which are already available internationally in MARC format. These entries are contained on magnetic tapes which are loaded onto the SABINET computer system, and the program then incorporates the entries into the database. The main MARC tapes used by SABINET are those of two large national libraries: the United States Library of Congress (LCMARC) and the British Library (UKMARC). Members of SABINET add bibliographic descriptions to the database, using the SAMARC format.

The SACD thus contains entries for sources which have been published worldwide, including South Africa. If a library participaing in SABINET wishes to add a bibliographic description for a source which it has recently acquired, it first searches the SACD to see whether this source already has an entry. If an existing entry is found, the library adds its holding statement (which is a unique code used to identify that particular library) to the entry, thus building up a joint catalogue. If there is no entry, the library compiles one, and enters this in SAMARC format in the database, together with its holding statement.

Existing bibliographies which are in database form can also be added to the SABINET system. In this manner, several bibliographies, for example the SANB (South African National Bibliography), are available through the SABINET system. SABINET thus offers members on-line access to a number of separate bibliographic databases held in its host computers.

Services offered by SABINET

Extensive services are offered by SABINET:

-     **Co-operative cataloguing:** SABINET members are able to share cataloguing activities, and thus save time, labour, and intellectual effort. For example, if twenty member libraries all buy the same source, only one bibliographic description is included on the SACD. This entry is based on a LCMARC or UKMARC entry already existing on the database, or else a new SAMARC entry is compiled. The holding codes of all twenty libraries are added to this entry. All member libraries which hold this specific source are able to use the SACD entry for their own catalogues. Such co-operative cataloguing

avoids duplication of intellectual effort and labour since it is no longer necessary for all of the libraries to undertake the cataloguing which is required to compile the original bibliographic description.

- **Co-operative acquisitions:** Before ordering a new source, a SABINET member can search the SACD to ascertain whether the source is already in another library, or on order by another library. In the case of expensive and/or little-used sources, the library could then decide whether or not to purchase the new source if it is possibly avialable through SAIS from another library. Members can also use the database to assess their collections in relation to the available sources. For example, a library can compare its holdings of sources on a particular subject with those which are contained on the database, and establish whether its own holdings are adequate for the needs of its users.

- **Interlending:** SABINET offers facilities which enhance the interlending system of Southern Africa. For example, a library can consult the SACD as a joint catalogue to ascertain where a particular source is held. If both libraries (the one requiring a loan, and the one which has the source in stock) participate in SAIS, they can immediately communicate with each other via SABINET to arrange for the loan.

- **Bibliographic searching:** The SACD contains bibliographic descriptions for over four million sources. The database can, therefore, be used as an extensive bibliography to check details of a source. For example, any bibliographic information relating to the source (author, title, publisher, data, etc) can be checked, and the libraries holding the source can be established. Searching on the SACD can be undertaken from a variety of access points, including author, title, series, classification number, subject headings, keywords, ISBN and ISSN.

SABINET provides access to several other bibliographic databases. SABINET continously adds new databases to its system to improve and expand its bibliographic services. Recent additions are *UnCover* (a periodical index which also has a document delivery service), and *Book data* (an in-print service).

The SABINET system offers a variety of other sophisticated facilities to members, including subsystems which enable the libraries to undertake individual library tasks such as building up their own catalogues, ordering sources, and organising their accounting systems.

At the end of 1994 SABINET, after twelve years, was a fully independent and self-supporting organisation with 64 full members. It also had 100

associate members and provided services to 322 sites. It's users come mainly from the tertiary and research sectors and public, national and educational libraries, but increasingly also from government and the business and professional sectors. Its South African co-operative database consisted of over two million records with more than six million holdings, including an extensive article index on **Periodicals in South African Libraries.** It also facilitates access to information produced by others, locally and internationally, as an information broker or as a business partner in co-operation with them.

THE NEED FOR AN AFRICAN LIS NETWORK

Libraries in other African countries have similar and often even greater problems than those in South Africa. Most can acquire only a fraction of the books, journals and other information sources which their users need. It has been reported that some have in fact been unable to purchase any books or journals in a year or more.

The recent profile of research libraries in sub-Saharan Africa, undertaken by the American Association for the Advancement of Science, gives details of thirty-one (mainly university) libraries. Of these libraries, eight do not subscribe to any foreign serials with their own funds, and only twelve libraries subscribe to over 100 subscriptions. The University of Zimbabwe is shown to be the best endowed library and, although in receipt of donor assistance, most journal subscriptions (some 1 578 out of 2 699 titles) are paid for with university funds. This is because the deans of relevant faculties have placed the library's needs first in allocating the university's foreign currency allowance. At the other end of the scale the University of Nigeria, Nsukku, lacks both an acquisitions budget and donor support. (5).

The first priority should remain to provide LIS with the necessary resources to obtain the essential publications which are required regularly. The more specialised and infrequent information needs for research can, however, best be addressed through computerised LIS networks similar to SABINET. Few countries have a sufficient number of libraries to develop a cost effective network service on their own. In 1994, at it's conference in Blantyre, Malawi, the Executive Committee of the Standing Conference of African, National and University Libraries in Eastern, Central and Southern Africa (SCANUL-ECS) identified the continued availability of much needed information as one of its primary concerns. Some university libraries are already connected to the Internet but

many, however, are not. All national, university, research and other major libraries should be connected in this manner as soon as possible. This could lead to a regional network with access to a centralised database and information service such as SABINET. The nature of the network and the services to be provided, need to be discussed with all the stakeholders

ensuring the rapid availability of information which could then be faxed
to the user until electronic transfer becomes a practical reality.

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