COMPUTERIZATION OF CBRI LIBRARY: A PRACTICAL APPROACH

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Technological developments in the past few years have made profound changes in the working atmosphere of the libraries. To keep pace with this revolution, an effort has been made to uplift the CBRI library to the status of an Information Centre, the advent of which started in the year 1997 with the establishment of a library network system with the software package LIBSYS.

INTRODUCTION

The **Central Building Research Institute,** Roorkee, a premier national laboratory was set up under the Council of Scientific & Industrial Research soon after independence. Since then the Institute has assisted in building construction and building material industries in finding timely and economical solutions to the problems of planning, foundations, housing, energy conservation, building efficiency and fire hazards.

Over the years, the library of the Institute has shared the challenges in achieving desired heights with its effective support in various R&D activities and has provided prompt services to the scientific community from the in-house data collection.

LIBRARY COLLECTION

There is a collection of books in the above mentioned areas along with the books of general interest. There is also a good collection of Hindi books. Total collection includes about 45,000 documents, comprised of:

* Books
* Technical reports
* Conference proceedings
* Bound volumes of periodicals
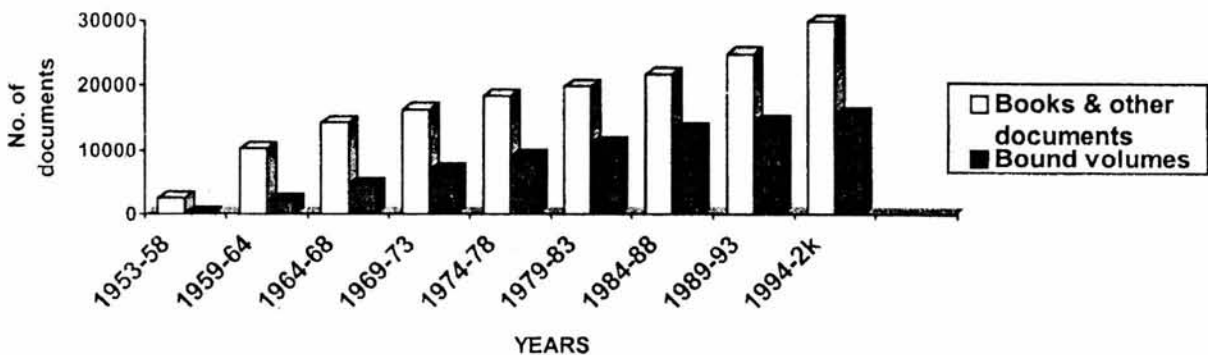* Compact disks and others
* Standards

Fig. 1 : Progressive collection of documents in CBRI library

In addition a large number of special publications of the following learned institutions/organizations/ societies are received, processed and serviced against membership:

Indian

- COSTED (Chennai)
- CSA (Banglore)
- ISET (Roorkee)
- ILA (Delhi)
- IASLIC (Calcutta)

Foreign

- ASTM (USA)
- IAHS (USA)
- CIB (Netherlands)
- RILIM (France)

LIBRARY AUTOMATION

Computers and other mechanised semi-automatic equipments have revolutionised the library field and information services. Library automation refers to "the extensive use of mechanical, electronic or microelectronic equipment to perform functions and activities associated with the libraries such as acquisition,

serials control, cataloguing and circulation and also to library and information services and networking".

Need

Library automation is required to:

* Improve library services
* Facilitate resource sharing and
* Increase technical processing efficiency over a manual system.

CBRI Library Automation

To meet the growing requirements of the scientific community and to keep pace with the latest technologies, a proposal for the automation of library was moved in 1996 and it got materialised in 1997. A special grant of Rs.15.00 lakh was approved for the same.

A network system was set-up through Windows NT server in client-server environment with an integrated multi-user library management software LIBSYS, comprising of five main modules and an Online Public Access Catalogue to encompass various library activities.
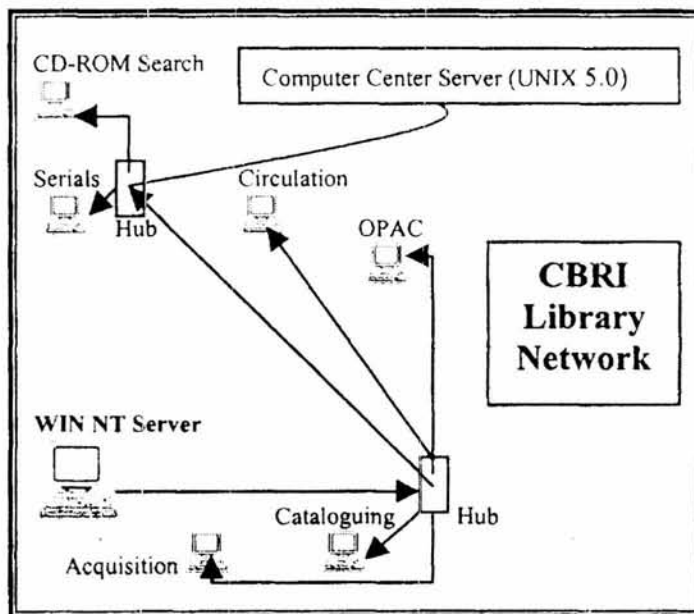

Fig. 2

LIBSYS

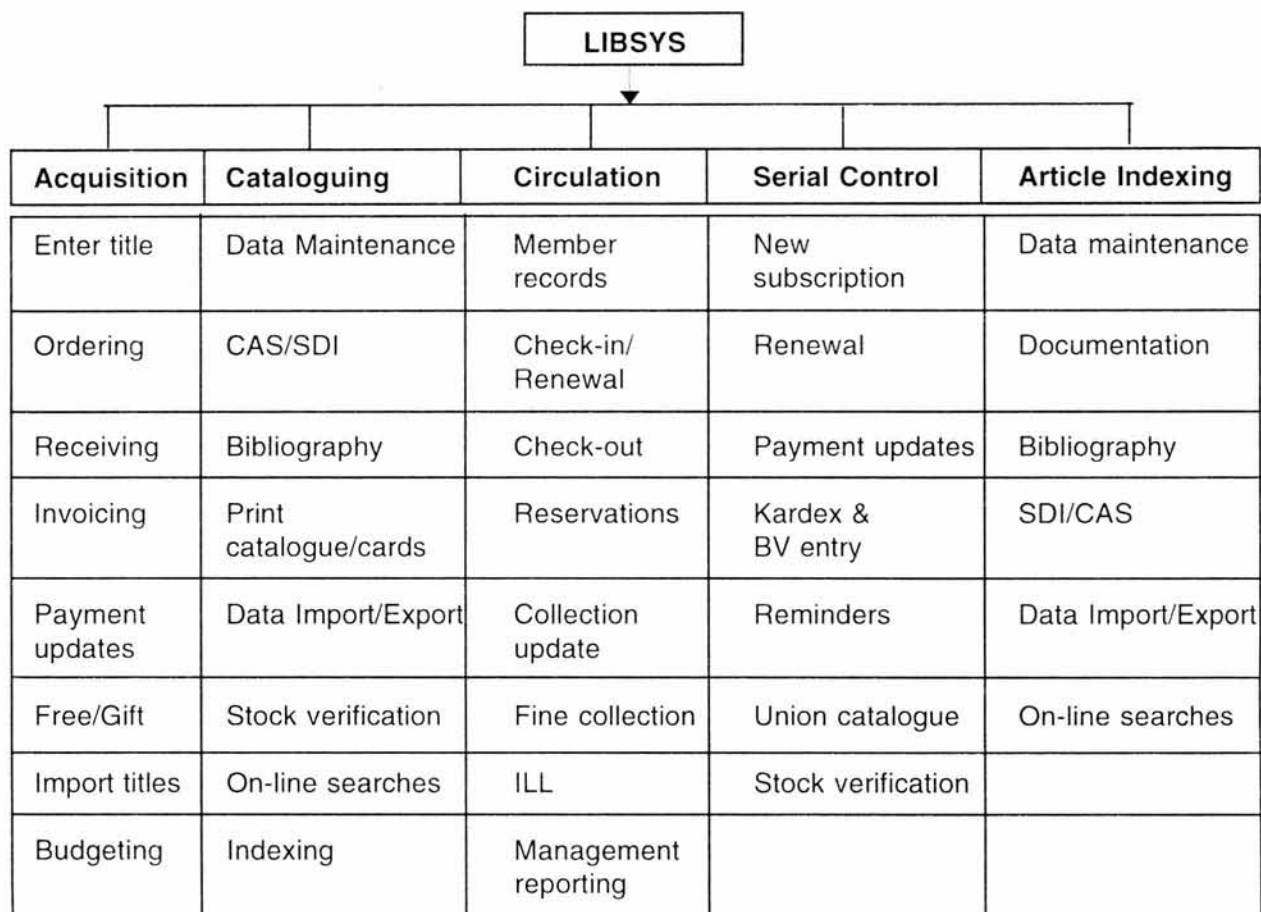| Acquisition	Cataloguing	Circulation	Serial Control	Article Indexing
Enter title	Data Maintenance	Member records	New subscription	Data maintenance
Ordering	CAS/SDI	Check-in/ Renewal	Renewal	Documentation
Receiving	Bibliography	Check-out	Payment updates	Bibliography
Invoicing	Print catalogue/cards	Reservations	Kardex & BV entry	SDI/CAS
Payment updates	Data Import/Export	Collection update	Reminders	Data Import/Export
Free/Gift	Stock verification	Fine collection	Union catalogue	On-line searches
Import titles	On-line searches	ILL	Stock verification	
Budgeting	Indexing	Management reporting		

Fig.3

In addition to the features shown in figure 3, facilities of report generation, enquiries, directories maintenance, system set-up is available in all modules, which help in the day-to-day library working.

STAFF TRAINING

To make the library staff conversant with the working of the software, an onsite first level training for library staff was organised by LIBSYS soon after its installation. Time to time advanced level training is also provided for the same at LIBSYS training center.

RETROSPECTIVE CONVERSION OF DATA USING LIBSYS

Data Entry Operators

Phase I

A group of data entry operators having the elementary knowledge of computers were engaged for the entry of already accessioned printed material directly from the documents so as to provide full bibliographical details and suitable subject headings/Keywords.

- using : LIBSYS ⟶ Cataloguing ⟶
  Maintenance ⟶ Retrospective conversion

Phase II

After the creation of Books database the work of entering the existing Bound Volumes was taken.

- using: LIBSYS ⟶ Serial Control ⟶
  Issues Management ⟶ Bound Volumes
  Collection (Back vols.)

The library staff was assigned the job of cross checking the entries from the accession registers.

Data import from CDS/ISIS

Data of withdrawn and obsolete documents already entered in CDS/ISIS was imported in LIBSYS.

- using: LIBSYS ⟶ Cataloguing ⟶
  Data Import/Export

The job of retrospective conversion of about 45,000 documents got accomplished within a period of one year.

INITIAL PARAMETERS SETUP

Setting these parameters is a one time job which helps in easy selection while executing corresponding functions related to day-to-day library activities.

Creation of Different Databases

There are three main databases

1. Books database

2. Bound Volumes

3. Articles

Book database has been further fragmented into Books, Standards, Reports, Conference Proceedings and News-items.

Record-Keeping

Using the record-keeping module of the main menu of LIBSYS, directories of the following were created:

- Vendor records
- Member records & categories
- Currencies/Exchange Rates
- Notices text
- Budget heads

System Setup

Using this facility various default values and some parameters were assigned so as to support the already manual working procedures of the library.

MAINTENANCE OF REGULAR ACTIVITIES IN LIBSYS

Current Data of Books and Bound Volumes

The data of current books purchased and bound volumes is being entered as and when received to keep the database up-to-date.

Circulation

Issue/Return of document, generating overdue reminders was started from the year 1999.

- using: LIBSYS⟶ Circulation⟶Check-out/
  Check-in

The system automatically keeps a record of overdue documents and generates reminder notices for the individual members.

- using: LIBSYS ⟶ Circulation⟶ Reports
  ⟶ Overdue notice

Entry of Current Loose Issues of Journals

From the year 2000, entry of current issues of the subscribed Indian and foreign journals and software generated reminder sending to the vendors has been started.

- using: LIBSYS → Serial Control → Registering issue.

- using: LIBSYS → Serial Control → Claims Monitoring Reminders.

Acquisition Process of Recent Additions

After taking approval from the Director for the documents indented by the scientists and other CBRI staff, orders are processed and thereafter their invoicing and accessioning is done.

- using: LIBSYS → Acquisition → Enter Title → Ordering → Receiving → Invoicing/Accessioning → Payment

COMPUTER BASED SERVICES

Services Helpful To Library Staff

Automation has relieved the library staff from many routine and time consuming functions thus giving time to initiate more useful services for the users. These are:

* Easy duplicate checking at the time of data entry

* As the software is integrated the bibliographical details entered once in Acquisition/Cataloguing/Circulation are available in other modules.

* Parameters set during creating directories in LIBSYS get applicable in all modules.

* Status of the document is readily available.

* Maintains document history and member history.

Services Helpful To Users

* **Current Awareness Services**

    - New additions list of documents (Monthly)

    - Indexing of Newspaper clippings (Weekly)

* **OPAC**

Online search facility for the bibliographic databases also includes key word based search. It also provides the periodic list of recent additions and allows users to find the materials issued and placing material on reserves, etc.

* **CD-ROM search**

    - **ICONDA (Building Engineering Database)** : Contains 20 years current data on architecture, town planning, building materials and other civil engg. subjects. (quarterly)

    - **CITIS(Civil Engineering Database) :** Covers 20 years current data of Civil Engineering Abstracts covering building, structures, foundations, irrigation, Public health etc.

    - **INDIAN STANDARDS ON CD-ROM :** Electronic version of Indian Standards of Civil Engineering division published by BIS.

    - **CIB-98 (CD)** : Full text papers with down loading and printing facility

FUTURE PROJECTIONS

To provide better, pinpointed and modern services for the institute members, faculty and students of Roorkee University, scientists of *National Institute of Hydrology,* Roorkee and engineers of *Bengal Engineering Group,* Roorkee, it is planned to equip the library with all the modern gadgets. A glimpse of the same is projected below:

Bar-coding

Generate bar-code labels of library documents and membership cards so as to issue documents using the barcode scanner.

Networking

*   Connect Library Network to the main network system of the Institute so as to facilitate users to browse OPAC from their PCs.

*   Join the above with the upcoming Roorkee Library Network.

*   Online Internet connectivity.

New Services Planned

*   Acquire encyclopaedias and CD-ROMs of other subjects for better accessibility to users.

*   Data Bank of CBRI publications.

*   Monthly Library Bulletin.

*   Bulletin board connected to the LAN for display of the latest arrivals of documents.

PROBLEMS IN AUTOMATION

Some of the problems encountered include:

*   **Expensive:** Automation is more expensive at initial stage. So careful planning will help.

*   **Communication gap:** Interaction between librarians and computer personnel is not very easy.

*   **Retrospective conversion:** Conversion and correction of manual records to computer readable form is time consuming.

*   **Shelving disturbed:** Retrospective conversion directly from documents disturbs shelving thus creating problems for users.

*   **Shortage of trained manpower:** Library staff already acquainted with the manual

system is generally hesitant in switching over to the computerization.

*   **Temperature control:** Need of air-conditioners along with computers further increases the budget required for automation.

*   **Power fluctuation :** Frequent power failures and voltage fluctuations hamper the successful computerization. This creates a compulosry need for maintaining the manual records.

*   During retrospective conversion in LIBSYS non-availability of authority files increased correction work.

CONCLUSION

Setting up the computer network system in the CBRI Library has assisted in the on-line access to the catalogue of documents in the collection, managing the front desk operations, easy acquisition of printed and non-printed documents, providing additional computer based services etc. Implementation of computer network in the library is not a one off-task for technology change. It is likely that this will be superseded with fresh technologies in the years to come. Thus a careful monitoring and evaluation of the changing scenario should be done so that the modifications may be made when appropriate.

ACKNOWLEDGEMENTS

REFERENCES

LIBSYS Manuals of all the modules. Libsys Corporation, Delhi, 1997 and 1998.