CHAPTER 4

PREVAILING SOFTWARE FOR ACCESSING LIBRARIES
In the case of libraries, application software is used to automate housekeeping operations such as acquisition technical processing, circulation, Serials control etc. Today quite a number of library software packages are available for librarian for housekeeping operations and information storage and retrieval purposes. *For developing in house software to solve complex problem, the requirements become severe and unmanageable. Because of these limitations, practicing librarians or information scientists should be exposed to some commercially available software packages.*

The different activities of a library can be grouped as follows.

- **Information Resources Building (IRB)**
  Acquisitions of monographs, serial control including check in claiming, budgeting and subscription control; accounting and report preparation cost modeling etc.

- **Classification and cataloguing**

- **Circulation control**

- **Information Retrieval**

- **Current awareness services**

- **Selective Dissemination of information**

- **Indexing and abstraction etc.**

- **On-line search assistance**

- **Training models for libraries and information users**

- **Word processing application**

- **Communication Network**

- **E-mail and Network**

1. **Functions of Library automation software packages**

   The objective of any library software package is to computerize all the activities of the library. It makes mainly the repetitive and tedious jobs of the library easy, save considerable time
of the librarian and makes him more responsible to his duties. The major functions of the library software package can be divided according to the area/sections/department of the libraries where computerization is required. The major areas/sections are:

- Cataloguing
- Circulation control
- Serial control
- Reference and Information retrieval,
- Acquisition related functions.

Besides the major areas as mentioned, above the library software package is expected to perform in other specific areas such as:

- Abstracting functions,
- Indexing functions
- Union catalogue related functions;
- OPAC searching;
- Database related function,
- User profiles, mailing list and other uses related functions
- Stock verification related function
- Barcode generation
- Access and searching of Internet
- Multimedia capabilities,
- Online acquisition, storage and retrieval capabilities
- Access to electronic information

The Software is also categorized based on their function such as.

- Basic software for data entry validation etc.
- Word processing software to manipulate text storage
- Data base management system for management of database
Text Retrieval package for storage and retrieval of non documeric records

Software associated with searching on-line retrieval system and CD-Rom databases.

Library House keeping software.

2. Criteria of Selection of Library Software Packages

The Selection of a good and perfect software package is not an easy job.

- First make yourself clear of your short term and long term needs of which you intent to buy a software develop functional specification of each job that you want to do with the software.

- The hardware requirement to run the software has to be determined precisely whether the existing hardware of the library would suffice or any modification/ upgradation is required has to be decided. The software must run under the operating system available in the hardware.

- Software must have compatibility to the computers on which it has to run. Some packages use a special peripheral device like modem, hard disk etc. A few others are designed to be used with DBMS or spreadsheets while buying a software the concerned library should verify whether any companion programmed or a special device/hardware are required or not?

- It should be user friendly to the people with little or no knowledge of computer use

- Provide sophisticated online input, data management and retrieval facilities appropriate for the efficient handling of a relatively large bibliographies database.
• The software package should provide full documentation on all aspects such as reference manual, instructions on line help etc. for assisting the librarian while using it.
• The vendor must support installation and provide training to operating personnel and user.
• Be flexible in allowing end-user to easily write their own specification for local variations.
• It should accept machine readable files in the RM, UNIMARC and eventual CCF formats to directly generate bibliographic description for local use and generate from its own internal bibliographic description an output file formatted in accordance with the RM and/ or UNIMARC and/ or CCF specifications.
• Most important of all these criteria is cost of package, which must be within budgeted amount and it. Should include vendors charge for training installation, maintenance and update.

3. **Categories of library software packages**

Library automation software packages developed by outside agencies for commercial purposes can be grouped under the following categories based on the types of function they fulfill in the overall automation activities;

3.1 **Database and information retrieval functions**

Help in database design maintenance, searching generation of personalized SDI, Indexes, bibliographies etc.

3.2 **Library management functions**

Carry out house-keeping operations likes acquisition, cataloguing circulation and serial control
3.3 Management support facilities

Facilitate support to the library management by providing MIS. Accounting and budgeting control.

4. Library Automation software package

A list of few individual packages is given below. There are hundreds of library automation software packages available at the global level; it is difficult to list those all. Therefore the given list is only a sample of the available packages designed and developed for the libraries in India.

4.1 CDS/ISIS, WINISIS [GUI]: UNESCO, in India

NISSAT/DSIR acts as the nodal agency

The acronym CDS/ISIS stands for computerized documentation system Integrated set of Information system. It is a menu driven generalized information storage and retrieval system designed specifically for computerized management of database it has been designed and developed by UNESCO’S Division of Software Development Application office of information programs and services. NISSAT is the national distributor of this package in India. Although not a true library automation software package it helps to develop automation software packages based on it. It consists of a set of computer programs that perform a variety of functions related to information storage and retrieval.

Important Features of CDS/ISIS

- The package allows its users to create non-numerical database.
- The database can contain over one-core fifty lakh records.
- The maximum size of display format is of 4000 characters.
- The handling of variable of variable length records, fields and sub fields thus saving disk space and making it possible to store greater amounts of bibliographic information.
• It has a data entry component, which facilitates entering, and modifying data through user created database specific work seats.
• It has a powerful report generator facility allowing the user to create desired printed products such as catalogues, indexes etc. according to desired formats of the user.
• Its search facilities are simple, accurate and rapid.
• It has a data interchange facility based on the ISO 2709, which is used as standard format by leading database producers.
• It has an integrated application programming language (CDS/ISIS Pascal), which allows the user to tailor the software to specific needs.

4.2 SANJAY: DESIDOC, Metcalf House, New Delhi

A library automation package based on CDS/ISIS, capable of interlinings two or more databases for a single application, handling numerical calculations and carrying out library housekeeping operation. CDS/ISIS is generalized information storage and retrieval software for the management of structured non-numerical database. It cannot be used straight to way for the management of housekeeping operations. Hence NISSAT, the distributing agency in India for CDS/ISIS package has become interested in getting the modules for library housekeeping operations developed indigenously so NISSAT has awarded project to DESIDOC for the development of these additional modules in PASCAL. Accordingly DESIDOC has developed the additional modules for the library housekeeping application on CDS/ISIS. This package is called SANJAY. The SANJAY is low priced library management software that runs
on the personal computer and can support textual information in India scripts. The SANJAY performs the library management function such as acquisition control on line catalogue management circulation control etc.

**Important features of SANJAY**

- To make the software user-friendly.
- The package is capable of handling numerical operations like calculation of budgeting allocation and expenditure.
- It provides linking of two or more Databases for a single application. It provides linking an acquisition system with the on line catalogue and circulation system.
- On line query search on “Books” database on fields link title author publisher class number accession number, keyword, corporate body etc.
- Printing of No due Certificates.
- Printing of accession list subject index, Author index Catalogue card as per AACR-2 online help to the user of the system etc.
- It has a set of 70 Pascal programmers and 25 special menus.
- Faster response time.
- Backup of the database at regular intervals.

**4.3 SOUL: - INFLIBNT Center Ahamedabad**

This is the most popular software package for university libraries. This software is windows based library management software package covering all aspects of library automation meat for university libraries. The soul is state – of the art library automation software designed and developed by the INFLIBNET Center on IUC of University Grant Commission
Ahamedabad as a total solution for Library automation and management. It is a user friendly software designed by using client-server Architecture which imparts extra strength to storage capacity, multiple access to single database various level of security, backup and storage facilities etc. Although looking at the name of the software one may thanks that is meant for university library only but in fact it is flexible enough to be used for automating any type or size of library in India.

This software was designed after a comprehensive study of different library related function practiced in university libraries. *At present SOUL used RDBMS on windows NT operating System as back end to store and retrieve the data. However keeping in view the trends in IT towards Linux operating system efforts are under way also to provide SOUL to work on Linux platform.*

Important Feature of SOUL

- Windows based user-friendly software
- It is based on Client Server architecture allowing to the users.
- It is specially designed to work in the large academic libraries, capable of handling large number of records.
- It is multi user software.
- User RDBMS to organize and query the data.
- Supports internationally know standards such as CCF and AACR etc.
- Provides export and import facility and adheres to ISO 2709 format
- OPAC is versatile and very user friendly with all options in built.
• OPAC is accessible over the web using any GUI based browsers.
• Functionally it covers every conceivable operations of university library
• Available at affordable cost.

Modules of SOUL: - SOUL has been divided into six broad modules.

• Acquisition
• Cataloguing
• Circulation
• Serial Control
• OPAC
• Administration

4.4 WILISYS: - WIPRO India Bangalore

WIPRO library Information system is designed to meet the requirements of all types of library belonging to academic, intuitional and research organizations it consists of two major components.

• WILJMAX; WIPRO Library Management system
• WILITRAX; WIPRO Library Abstracts system

4.5 LIBSYS: - Libsys corporation New Delhi

Developed and marketed by libsys corporation New Delhi Libsys is completed menu driven in all of its functions menus are used to prompt the operation through the options available in each stage in the process. It is the most comprehensive and popular library software package available in a India. It is a full-integrated multi user system operating on UNIX/VMS/ LAN platforms and supports all activities relating to Computerization of library operations.
Important Features of Libsys

- A multi user system
- Choice in any module
- Computer menu driven

4.6 GRANTHALAYA – Indian National Scientific Documentation center (INSDOC) New Delhi

*It is complete library automation package designed and developed in FoxPro by the Indian National Scientific Documentation center (INSDOC) New Delhi. This package is available in MS-DOS.*

Important Features of GRANTHALAYA

- This software has seven modules
- This Software package has been developed based on object-oriented design.
- Software package adopts common communication Format (CCF)
- Export and import of data to and from ISO 2709 and ASCII Format is possible.
- Dictionary is provided in the package for data elements like publishers keyword, accompanying materials etc.
- The software is provided with sophisticated tools for retrieval of information by different search parameters.
- The software is easy to learn and use it provides on screen messages to help user.
### Few names of library software packages available

<table>
<thead>
<tr>
<th>Name of software</th>
<th>Name of developing company</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECHLIB PLUS</td>
<td>Information dimensions Inc. USA</td>
</tr>
<tr>
<td>CAIRS – LMS</td>
<td>Leatherhead food Research Association (LFRA) U.K.</td>
</tr>
<tr>
<td>MAITRAYEE</td>
<td>CALIBNET ( CMC Ltd.)</td>
</tr>
<tr>
<td>ULISYS</td>
<td>WIPRO</td>
</tr>
<tr>
<td>LIBERATOR</td>
<td>CALIBNET ( CMC Ltd.)</td>
</tr>
<tr>
<td>UNILIB</td>
<td>Hindustan computers limited Bangalore</td>
</tr>
<tr>
<td>LIBRARIAN</td>
<td>Mudra Electronics New Delhi</td>
</tr>
<tr>
<td>MECSYS</td>
<td>MECON</td>
</tr>
<tr>
<td>DELMS</td>
<td>DESIDOC</td>
</tr>
<tr>
<td>BASIS PLUS</td>
<td>Information Dimensions Inc. USA</td>
</tr>
<tr>
<td>CHIKA</td>
<td>DESIDOC</td>
</tr>
<tr>
<td>CLIS</td>
<td>Tata Unisys Ltd.</td>
</tr>
<tr>
<td>CLMS</td>
<td>R.C. Prasad</td>
</tr>
<tr>
<td>ALICS</td>
<td>Softlink international</td>
</tr>
<tr>
<td>ILMS</td>
<td>INFLIBNET / DESIDOC</td>
</tr>
<tr>
<td>LIBRA</td>
<td>IVY System Ltd.</td>
</tr>
<tr>
<td>LIBRARY</td>
<td>MANAGER System Data Control</td>
</tr>
<tr>
<td>LIBRES</td>
<td>Frontier information Technology</td>
</tr>
<tr>
<td>PLAMS</td>
<td>Dr. R.C. Prasad</td>
</tr>
<tr>
<td>DYSSEY</td>
<td>SRA System Ltd.</td>
</tr>
<tr>
<td>MEMLIB</td>
<td>MEMOX Pvt Ltd.</td>
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</tbody>
</table>

After seeing all those software it can be noted, that it depends on the requirement of an individual organization which software suits it.
5. **Conclusion**

from field survey and related contexts

**Status of the automations:** In the table 7-computer library is being used or not is being exhibited.

<table>
<thead>
<tr>
<th>Status of the automations</th>
<th>No. of Instruction</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully Computerized</td>
<td>15</td>
<td>35</td>
</tr>
<tr>
<td>Under process</td>
<td>20</td>
<td>46</td>
</tr>
<tr>
<td>Nil</td>
<td>08</td>
<td>19</td>
</tr>
</tbody>
</table>

The aforesaid table 7 the present status of computer is library. In the 52% of libraries computer are available. In which 35% libraries are fully computerized the work of 45% libraries are under the process of automations and in 19% of libraries are not being under the process of any automations work.

**Status software package:** It has been exhibited in table no 7 that is how many libraries software package are being used for automation.

<table>
<thead>
<tr>
<th>Name of the Software</th>
<th>No. Of the Institution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUL</td>
<td>27</td>
<td>77</td>
</tr>
<tr>
<td>Lib Man</td>
<td>01</td>
<td>03</td>
</tr>
<tr>
<td>Lib Sys</td>
<td>01</td>
<td>03</td>
</tr>
<tr>
<td>CDS/ISIS</td>
<td>03</td>
<td>08.5</td>
</tr>
<tr>
<td>Self mode</td>
<td>03</td>
<td>08.5</td>
</tr>
</tbody>
</table>

It is known from table no 8 that in 35 libraries automation software package are being used, out of which maximum 77% of SOUL are being used. CDS/ISIS and self-mode of 3%, 4% Lib Man and LibSys are being used.

**Internet facility:** Internet facilities are available in 26 of institutions.

**E-mail Facility:** E-mail Facility are available in 25 institution.
REFERENCE

9. Course Material INFLIBNET
10. Course Material INFLIBNET

