LIBRARY AUTOMATION SOFTWARE IN BANARAS HINDU UNIVERSITY LIBRARY SYSTEM : AN EVALUATIVE STUDY

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ABSTRACT

The effective bibliographic information delivery is a key component of university library system. Computer software packages are designed to perform library housekeeping operations. The use of ICT enables the library not only to offer their user the appropriate information available within the library premises but also to gain access to catalogs of other libraries. Banaras Hindu University (BHU) Library system adopted Software for University Libraries (SOUL) software that has been designed and developed by the INFLIBNET. In this paper, SOUL software has been evaluated and the problem faced by BHU Library system while working with SOUL has been discussed.

Key Words : *Automation, SOUL, Library software, Banaras Hindu University (BHU).*

INTRODUCTION

Use of information and communication technology (ICT) was started in the libraries to increase the efficiency and effectiveness of the library operations and services. Normally, library automation software is used in expectation to automate all library functions like acquisitions, cataloguing, circulation, administration, serials management, OPAC, ILL and statistical reporting. To provide the latest and timely information to the user, efficient library automation software is needed. Successful library automation software depends on database management systems, client-server architecture, search engine technology, and, increasingly, software used in web based applications. There are number of software available for library automation as open source as well as proprietary software. The SOUL software is proprietary software developed by Information and library network Centre. Banaras Hindu University (BHU) library system is using SOUL software.

B.H.U. LIBRARY SYSTEM

The Banaras Hindu University Library System consists of Central Library at apex and 4 Institute Libraries, 8 Faculty Libraries, 26 Departmental Libraries, and one South Campus Library. The total collection of library is over 10 lacs books, bound volumes, PhD theses etc. Library has more than 10000 digitize manuscripts, thesis and rare documents to serve the students, faculty members, researchers, technical staff of fourteen faculties consisting of 126 subject departments of the university. At present BHU Library system is using SOUL (Software for University Library) software for its housekeeping operations.

SOUL 2.0

Software for University Libraries (SOUL) is an integrated library management software designed and developed by the INFLIBNET, Ahmadabad, an inter university centre of UGC and also sponsored by UGC, Govt. of India SOUL is fully based on Microsoft Dot Net framework. It works under client-server environment, multiple accesses to single database, various levels of security, backup and storage facilities etc. *SOUL 2.0* was released in January 2009. The backend database of SOUL 2.0 is designed with the latest version of MS-SQL and MySQL. It supports full MARC 21 Unicode-based bibliographic format and copy cataloguing by using ISO-2709 standard[1].

SERVICE AVAILABILITY

The SOUL 2.0 contains all the core modules which are required for library automation. Each module has further been divided into sub modules for its proper functionality. The soul 2.0 software has six main modules.

- Acquisition
- Catalogue
- Circulation
- OPAC
- Serial Control
- Administration

ACQUISITION

The module enables to handle all the major functions related to document procurement, such as suggestions management; order processing, cancellation and reminders; receipt, payment and budgetary control; master files such as currency, vendors, publishers etc.; and reports.

CATALOGUE

Catalogue module is used for retrospective conversion of library resources. It also facilitates library staff to process the newly acquired library resources. Departmental libraries also can manage their own acquisition.

CIRCULATION

This module has all possible functions of circulation such as membership; transaction; inter-library loan; overdue charges; reminder; search status; maintenance of the items such as binding, lost, replace, missing, withdrawal, etc.; and report generation based on the various requirements.

ON-LINE PUBLIC ACCESS CATALOGUE (OPAC)

Major functions provided in the module are simple search; Boolean search; advanced Boolean search; displaying and downloading of records in MS Excel, PDF or MARCXML; and Search support for the items that are in the acquisition process in the library.

SERIAL CONTROL

The serial control module is based on the KARDEX system. The functions that make serial control module are suggestions; master databases; subscriptions; check-in of individual issues of journals; payment, reminder, binding, and title history; export / import by using ISO 2709 bibliographic exchange format; article indexing of journal articles; cataloguing of electronic journals; and keeps track of the history changes of the journals.

ADMINISTRATION

The administration module of the SOUL 2.0 has been divided into three major sections; these are User management, System Parameters and Masters. This administration module includes some important features, such as, grouping of users based on the policy; transactional rights over the systems;

transaction level security to users; various configuration settings such as labels, e-mail and other parameters related to the software use; and common master databases being used in modules.

ENHANCE FACILITY

The in-built network feature of the software allows multiple libraries of the same university to function together as well as access to the distributed databases installed at various university libraries and union catalogue mounted at INFLIBNET using VSAT network. Soul 2.0 allows cataloguer to create their own templates for data entry of different library resources and also can create different templates for leaders and fixed fields of MARC21. It supports copy cataloguing in MARC21 format by using ISO-2709 standard. Library can create multi-lingual database by using Unicode Character set; and supports full MARC 21 bibliographic format. The circulation module is fully compliant with the NISO Circulation and Interchange Protocol (NCIP) version 2.0 for electronic surveillance and RFID based transaction of the items. Library user can download their search records in MS Excel, PDF or MARCXML format. The most important feature of soul 2.0 is the user friendly help link on the main page[3].

BACKUP AND RESTORE FACILITY

The data backup and restore facility in soul software is simple. Library staff can create backup file (.bak) by taking backup from SQL Server. SQL Server Management Studio software can be used to take soul database backup from SQL server and to restore it in the same or another SQL server. Backup and restore operation of soul software should be done in two different ways:

    a. for regular backup operations, backup file (.bak) should be created. It can be used to restore the database in same server.

    b. detach .mdf/.ldf file should be created for backup and restore operation, if server needs to change from one machine to another machine or to upgrade and re-installing the software.

HARDWARE AND SOFTWARE REQUIREMENTS

Minimum hardware requirements-

- Processor Type : PIV or Higher
- Processor Speed : 1.6 GHz or Higher
- RAM : Minimum 512 MB (1 GB Recommended)
- Free Hard Disk Space : 400 MB (Minimum)

Operating System(OS) requirements-

- Windows XP (SP3) , Windows Vista , Windows 2003 Server, Windows 2008 Server

Other Software requirements-

- MySQL or any other RDMS for backend database.
- Windows Installer version 3.1
- Dot Net framework version 2.0
- Microsoft Data Access Components version 2.8 (SP1)
- Microsoft Report Viewer 2005

To install WebOPAC Internet Information Services (IIS) 6 or higher is needed. It is a web server software application[4].

Problems faced by BHU Library System with SOUL software and suggestion given for the betterment of the software:

Banaras Hindu University Library System is a big library system having 4 institutes, 8 Faculty Libraries and 26 Departmental Libraries and all need to be integrated. During the process the below listed problems have been identified at the initial stage:

1. In multi copy cases, if some books are held by (Central Library) CL, and others by

different departmental libraries, then the departmental libraries are unable to edit their data even they cannot add next copies.   Issue-return from departmental libraries is not possible in this case. The database of such departments should be furcated from central library database. So that Central library can process the departmental libraries books but each department should only process its own book.

2. If data entry is done from the acquisition, there is no option for adding the holdings of the same book already purchased earlier.

3. In the case of data entry done from the acquisition, Author's name (surname, forename) problem.

4. In case of data transferred entries, there is no appearance of punctuation marks, while it is necessary to generate catalogue cards.

5. BHU Library is subscribing serials through vendors and/or directly from the publisher. The publisher/vendor raises the bill/invoice of more than one journal and after processing that bill/invoice we receive single cheque/demand drafts for number of journals. It is not possible to enter details of payment of single journal in the required mandatory field of your software. It is also create problem to give price for individual serial in TITLE ENTRY as we are subscribing journals in package.

6. There is no provision of free journals because in title entry price of document is mandatory.

7. There is problem of entry of journals which are published by only month & year while Volume and Issue no. is mandatory.

8. There is problem in generation of schedule of journals which frequency is fortnightly. For example, three issues are scheduled in January and March 2012 while it must be two issues only in each month in case of

"Journal of Documentation and "Journal of Materials Research".

9. There is no option to select the seasonal frequency i.e. spring, summer, etc.

10. There is no provision of modify entry done in any sub-module if any mistake has been occurred and we have moved to next sub-module.

11. In OPAC search, when journal is searched under bound volumes then only the search result is shown. In other search category like monographic serials, loose issues, etc. there is no result.

12. There should be a caption in location field (marc 852) for input of volume no. against the accession nos. i.e. volume nos. should be correlate with accession nos.

13. There is no option to modify title of the journal in update title.

14. The currency of the subscription price is not shown in the order report.

15. There is no option to edit/ delete of a particular purchase order. Software should have facility to edit/ delete purchase order.

16. It requires new page setup each and every time while customized setup should be saved in a particular machine.

17. In case of hanging entry, where the author of the work is not present, card catalogue is still not in proper manner.

It must be mentioned that the Inflibnet personnel are trying hard to solve the above mentioned problems and they have been successful in sorting out some of the problems.

CONCLUSION

A library management system, also known as an automated library system is software that has been developed to handle basic housekeeping functions of a library. The SOUL 2.0 has good feature for

university library automation. Almost each and every possible module has been developed to automate Indian university libraries. But the main problem is the software is fully based on Microsoft Dot Net framework, so it can run on windows environment only. Customizable Queries or enhanced report should be incorporated in the software. Although, BHU Library system comprises of several institutes, departments and faculties and all needs to be interconnected. The implementation of SOUL software is helping the BHU Library system to stream line the library automation process.

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