# Panskura Banamali College Central Library Data Migration From Libsys To Koha Automation System : An Experience.

**Dr.Abdul Musref Khan** Library Profession Staff Central Library Panskura Banamali College West Bengal : India. Pin- 721152

# **Abstract:** Open Source library management systems have very recently made foot print in automation software market. Koha software is popular among Indian library community due to the availability of comprehensive functional modules and active community. Migration process from legacy library automation system to Open Source candidate need systematic planning and teamwork. Koha has attained maturity in functions and features and ready to use in any type of libraries. This paper tells the story of migration process from LIBSYS automation software to Koha in Panskura Banamali College. This paper discusses the need for open source library management software. It focuses on the process of designing a bibliographic database of Panskura Banamali College central library from the experiences gained during the implementation of Koha also very useful package.

*Keywords:* Koha, Open Source Software, Inter Library Management System, ILS, Automation, LibSys, Data Migration System.

Introduction: The advent of ICT has had an impact on knowledge management practices. In its pursuit of excellence, libraries have also felt the necessity of change and development. The academic libraries need to have facilities that promote effective and interactive access and use of information services to all its users. An Integrated Library System is an essential tool for effective customer service, stock management and management of services provided by the libraries. Library automation software's are integral part of any library system. Proprietary software's were governing library automation market. Libraries have to shell out a good amount of budget allocation for purchasing and maintenance of proprietary automation software's. Local vendors are playing dominant role in library automation market in India. Libraries are not bothered about missing standards and protocols with proprietary systems developers. Library standards and protocols are very essential for data exchange and make connection with other information systems. Very few commercial vendors are providing software with advanced features and services. Libraries in developing countries are not in a position to buy comprehensive proprietary automation software's. Normally it costs more than their annual library budget in the case of a midsized library in terms of collection size. Investment in a proprietary library automation system is a never ending process. Payment is necessary to ensure the ongoing software support. At the same time, libraries have no control over the software and data. Koha implementation in reputed libraries in India has got enough publicity among library professionals. News regarding Koha implementation in Delhi Public Library, Mysore University, British Libraries and Connemara Public Library etc have appeared in popular online discussion forums like LIS Forum and came to the attention of library professionals. Migration from existing library software to another one is a painful process. It requires time, resources and skill availability. Panskura Banamali College Central library is bestowed with library professionals and have received support from College authority. Library could migrate from legacy automation system to Koha with the help of staff with experience in cutting edge cost effective technologies.

**Background**: Panskura Banamali College is a West Bengal Govt. aided college affiliated to Vidyasagar University. This was accredited with grade "A" by NAAC in 2005, Re-accredited grade "A" in 2016. This college is arguably the largest college in Rural Bengal, in terms of its strength of students 8000 (Eight Thousands) and the number of subjects taught at the undergraduate and postgraduate levels. Recently, UGC has elevated the status to a Ph.D. Degree College. The college has to function in three shifts: Day Section, Morning Section (Extended Day) and Evening Section. The Panskura Banamali College has a well equipped library with a collection of books, journals, reports, audio-video materials, e-books, online databases and other resources to serve its users. Now, the library is fully automated using barcode technology to issue and return books with the help of open source library software Koha. In this library open access system is followed. The user community, here is comprised of UG & PG students, research scholars, ex-students, faculty and other staff members of the college. Problems encountered during day to day transactions in Panskura Banamali College Central Library with the previously used software LibSys There were several problems faced while using LibSys for routine works of the library. Some of the major problems are as follows:

- I) Lack of Web OPAC module for browser based searching throughout the campus.
- II) Lack of good configuring features to set circulation privileges for various types of users and documents.
- III) Lacking more features and flexibility related to fine management.
- IV) Less user friendly cataloguing module.
- V) Lack of features related to bar-code and membership card generations and configurations.
- VI) Lack of data export facility.
- VII) Library Software use by contact costly.

### LibSys:

LibSys is an integrated library management software package designed and developed by LibSys Corporation, Gurgaon, Haryana. It was initially developed in COBOL language but now it is converted into C language and covers all the activities of library related to acquisition, circulation, cataloguing, serial control, articles indexing, abstracting, OPAC, etc. LibSys follows international standards such as CCF, MARC, etc. It has some special characteristics, viz. interactive and screen oriented, menu driven, user defined security, multilingual and powerful editing facilities.

### Koha:

Koha is widely used open source software. Koha is the first choice of the librarian who wants to automate library with open source software and those who wants a transition from commercial software to open source software. The software developed initially in New Zealand by Katipo Communications in 2000. Koha is released under the GNU 2 General Public License and Linux is used as Operating system. Apache web server is required to serve the Koha on web. The data entered in the Koha are stored in MYSQL database. Perl is the programming language used in Koha. Acquisition, cataloguing, circulation, serial control, report, administration are the basic modules available in Koha.

### Finding and Observation: LibSys Vs. Koha

- i) LibSys allows module and sub module specific privileges to staff. It is possible to ensure a high level of security in the use of functional modules, based on privileges for library staff.
- ii) Due to books overdue gradual slab wise fine increase is possible in LibSys. This was not seen in Koha.
- iii) Departments and courses under category can be defined in LibSys. Koha does not have this feature.
- iv) Koha allows an item to be transferred to another library configured to be in the network. This is useful and required in public library networks. Status and availability of a particular document we can easily identify from any branch library.
- v) Koha allows due date for check-outs include or exclude library holidays. Bydefault LibSys excludes holidays in due date calculations.

### The Need for Change:

The reasons for shifting towards open source software from commercial software were –The development of the library needed up gradation of the software with web OPAC. During purchase of LibSys, due to budget constraints, access to only selective modules were taken. Library had two options upgrade the present software or replace with new software. Upgrading the present commercial software required more resource than migration to new open source software. Implementation of uniform and international standard likes MARC 21, Z39.50 so that data can be migrated to any other format. Avoid vendor locking for ILMS by using open source software.

# **Observations during the Transition:**

Below is the detailed discussion about the steps taken at the time of implementation of Koha and also about the customization, which had been done for the immediate necessity of the library. This may be further extended in due course of time.

# Software Selection:

A market study was done for available ILS in the market. The library needed technical support for installation and initial implementation of the software due to lack of capable in-house human resource. This facility was best available with Koha.

Features	LSease 4.1	LibSys 7	Koha	Evergreen	New GenLib
Туре	Commercial	Commercial	Open	Open	Open
			Source	source	source
Expansion	Limited workstation	Limited workstation	Unlimited workstation	Unlimited workstation	Unlimited workstation
Price	Web OPAC only 80,000 & another 80,000 for each added work station	4,41,665	Free	Free	Free
Managing various types of materials	No	Yes	Yes	Yes	Yes
Supporting multi-branch mode	No	Yes	Yes	Yes	Yes
Reports Customizable	No	No	Yes	Yes	Yes

### Hardware Selection and Site Preparation:

The standalone server was selected with CPU-Xenon processor, 8 GB RAM, HDD-1TB, in Linux environment. The server required uninterrupted net connection for Web OPAC and copy cataloguing with a built in Z39.50 search engine. Due to various internal environmental problems, this took about a year to be fully operational. Till then it was working only on LAN. Two separate machines with LAN connection were given user OPAC access.

### Data Migration:

During the migration from LibSys to Koha, there was no support from LibSys. Export/import service was locked and there was a price for opening. The database from LibSys was not segregated material wise. The library has books and nonbook materials which were all entered in a single database. The segregation was done with alpha-numeric accession numbers only. When migrating to Koha, these posed a problem. The serials module data could not be retrieved as the service provider was reluctant to do the same. All the journal back volumes had to be re-entered in the database. The field format is different for LibSys and Koha. So for data consistency, checking and modification for each record was required.

### Training:

At the time of the implementation, a three days training was given to the library staff. A few of the staff were reluctant to accept any change in the work environment. All the library staff did not have the competencies or the ability to adapt to the change. Also some of the staffs were uncomfortable with computerized environment.

### Implementation of Koha:

The Koha administration menu deals with various system parameters. It gives wide range of scope for defining different parameters for the functioning of Koha, like, library branches, item type and the patron classification. System preference is the most important module of Koha. It deals with administration and maintenance part of Koha. As the organization is in expansion mode, library resources are not only confined to the four walls of the library. It has various subject corners spread out in the different parts of the campus. For example the studio has the films section, the cafeteria has the photography corner, the tea coffee zone houses the books on Indo-China relationship. Apart from this, a new campus with different departmental libraries is under construction. Using the libraries and group function different libraries are created with their respective code. These help to judiciously manage the resources in a particular zone by the staff and the users can easily locate their item of interest through the description in the OPAC. This is followed by creation of the different item types like books, DVDs, journals etc. used for circulation rules. To provide service to the various groups of users several member categories are created, like administrator, faculty, staff, student of BA, student of BSC, student of MA/MSC, external members etc. The mandatory tags for filling up the bibliographic details are 000, 008, 040, 082, 245, and 942 have been created from the authorized values in administration menu. ISBN/ISSN, personal name, publication distribution, physical description, subject, series area need no change. In the item type page - specific library, shelving location which has already been created from administration menu needs to be mentioned, along with barcode, volume no. etc.

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Picture : Koha Circulation Module (Panskura Banamali College)

In Circulation module, the loan period and the fine system in Panskura Banamali College library is multi- level. For students text book is issued for four days and reference for fifteen days. Faculties can issue both text and reference for a month. Other staff and external members can issue all books for 15 days. For management there is no restriction. Only two renewals are allowed for all members. The libraries follows an incremental fine system which has been implemented in Koha. For each resource for all categories except management, for per day's fine is Rs/-1.00 per item. Users for check-ins, check-outs, advance notice for due date and item-due reminders. Koha has a wide range of SQL reports for various needs. There is a huge database of guided reports. The statistical reports give acquisition, patron, catalogue, circulation and serials reports.

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IMPORTANT LINKS		Shift	Issue/Return/Renew	Timings
LIBRARY WEBSITE	The college library is more than 54 years old, and comprised of many old books whose valuation is not possible. Many books donated by Alumnus and Publishers are also in the Library whose valuation cannot be done. Many Departments have its own seminar Library where reference and also text books (donated and some purchased by departmental grants) are available. Some books that are very old are not included in this count I has been catering to the needs of the Fight thousand students	Morning Shift	Issue/Return/Renew	08.00am- 11.30am
DIGITAL LIBRARY		Day Shift	Issue/Return/Renew	10.00am- 03.30pm
UGC E-CONTENT	of undergraduates, postgraduates, research scholar, One hundred faculty members and more than one hundred staff members of the 25 Under Graduate, 7 Post Graduate departments and 2 Training Departments (B.ED & B.PED) of the	Evening Shift	Issue/Return/Renew	01.00pm- 05.45pm
COLLEGE WEBSITE	Institute. The Library routine services have been fully automated using the library database management software 'Koha'. The library database has been digitalized and computer enabled searching of library resources has been made. Uninterrupted power supply to the library digital network has been ensured through high power online UPS. Steps are being taken to execute web based searching of the library materials. It is an integrated Library management software package, with all the required modules for automated library management systems. The Central Library being a core member of INFLIBNET- NLIST & NDL of IIT Kharagour provides online access to many important full-text databases in Science and Arts.		1	
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Picture : Koha OPAC Module (Panskura Banamali College)

The OPAC is the front page of the library. Koha gives facility to customize the OPAC page according to the needs of the library and the users. Even one can use the OPAC as a content management system. It has a customizable search option, where users can choose the fields they want to search. The Panskura Banamali College Central library OPAC introduces the user to the library with information about the library and the rules and regulations. Membership forms can also be accessed from the website. Members can access e-journals and connect to College website, Library website, UGC E-Content and Digital Library through the links provided in the OPAC homepage. The best feature of Koha OPAC is it gives opportunity for two way communication. Not only the library administration but users can also use the OPAC page for their advantages. It has some unique features which members can use to communicate with library administration as well as among them.

### Future of the Study:

Study the transition from a commercial ILS to open source ILS. Future prospects of development.

### Conclusion:

Koha has a lot of potential for development. But how to use its advantages depends upon the devotion and availability of technical manpower in libraries. The structure of Koha and its community requires that individuals have programming expertise to engage in open code modification and exchange. Librarians are not fully equipped to take on this responsibility. Only when librarians are fully ready to take on this responsibility, the true scope of open source can be realized. Koha software has an extremely user-friendly interface and it is cost effective which makes more challenging to the traditional LMS software like LibSys. The unique feature of the browser-based facility of the software means that multiple operations can be performed at a time. The 'Tools' module is the prime area for customization any module as per library's needs. Batch functions such as the patron import, patron card creation, Batch patron deletion or the batch item modification become easily for the libraries that regularly have to handle significant volume of repetitive tasks. Koha's circulation reports and statistics related areas are powerful but not userfriendly like LibSys. Ultimately, only specialized staff with appropriate knowledge and skills in programming knowledge can operate these specialised functions.

## References:

- 1. Mukhopadhyay, P. (2006) Five Laws and Ten Commandments: The open road of library automation.
- 2. Pal, Surendra Kumar & Sonkar, Bharat Praveen. Open Sources Software for Modern Libraries : a comparative study of ABCD Koha and Newgenlib. Retrieved on 25th May 2017.
- 3. Thakur, C. (2013). Libsys 7 to Koha. Retrieved on May 30, 2017 from https://www.slideshare.net/ imprataap/libsys-7-to-koha-21395063
- Neelakandan, B., Duraisekar, S., Balasubramani, R. & Srinivasa Ragavan, S. (2010). Implementation of Automated Library Management System in the School of Chemistry Bharathidasan University using Koha Open Source Software. International Journal of Applied Engineering Research, Dindigul,1(2), 149-167
- 5. http://www.Koha-community.org
- 6. Mukhopadhyay, P. (2008). Library automation through Koha. Kolkata, West Bengal: Prava Prakashani.
- 7. Engard, N. C. (2011). Implementation Checklist. Retrieved January 9, 2015, from http://manual.kohacommunity.Org
- 8. Government of Kerala decides to use Koha. (2008, August 19). Retrieved January 9, 2015, from http://librarytechnology.org
- 9. Vimal Kumar V., & Jasimudeen, S. (2012). Adoption and user perceptions of Koha library management system in India. Annals of Library and Information Studies, 59(4), 223–230.