COMPARATIVE STUDY OF ILMS IN DIGITAL LIBRARIES

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ABSTRACT
A variety of Integrated Library managementSoftwares are commonly used in all academic Libraries. Aim of this paper is to present a comparative view of library automation software special reference to OSS i.e. KOHA, Commercial made Software i.e. LIBSYS and Local made software (Free-ware) i.e. WEBLIB. The work focuses on advantages of Free-ware of ILMS over other ILMS most commonly used in all academic Libraries. This provides detailed comparativestudy based on review of earlier studies, information gathered from the web pages of the ILMS and hands on practice. It will be helpful for library professionals who are planning for library automation for their libraries.

KEYWORDS
Library Software, KOHA, LIBSYS, WEBLIB, OSS, ILMS, Library Automation, Freeware, Academic libraries.

INTRODUCTION:
Academic Library is defined as a place in which textbooks, reference books, thesis, recordings, periodicals are kept for private or public uses. Integrated Library management software (ILMS) has been designed to perform basic housekeeping functions such as acquisition, technical processing i.e. cataloguing, circulation control, serials management, Inter library loan and OPAC. All though all housekeeping functions are separate but through ILMS all these functions are integrated with a unified interface. Computer and Information technologies have brought revolutionary changes and also add some features to library management software such as to exchange information with the help of network of libraries in digital library system, handle digital media, e-books, e-journals and web- OPAC in the information acquisition, Processing, storage retrieval and dissemination. There are so many software developed in the field of Library i.e. Open Source Software (OSS) like KOHA, Newgenlib, Evergreen etc., Commercial LMS like LIBSYS,SLIM21, DELSIS.and Local made software like WEBLIB, LIMT,LIBSOFT which provides a total solution for Library Automation. Present study is based on the comparison between KOHA, LIBSYS and WEBLIB in Academic Libraries. As far as Open Source Software (OSS) is concerned OSS cost nothing or very low cost to use. But Commercial LMS are very expensive to install and upgrade in this era of budget constraints faced by libraries Therefore rather than spending lots of money for the maintenance on commercially- licensed software it is better to have some alternatives like freeware or local made ILMS example WEBLIB.

OBJECTIVES OF THE STUDY

➢ To define Comparative study of WEBLIB, KOHA and LIBSYS.
➢ To study advantages of WEBLIB library automation software in academic libraries.
➢ To know about the special features of WEBLIB
➢ To elaborate the modules of WEBLIB.

Impact of Information Technology on Academic Libraries

The implementation of information technology in the libraries has provided solution to serve the library services to get more user satisfaction. Digital library has evolved after the implementation of IT in the library and information centers. The past two decades have seen great changes in library due to information technology. The technological advancement have made significant impact on the growth of knowledge and unlocking of human potential. In library, the impact is clearly visible on information resources, services, and people (Manjunatha,2007).

LITERATURE REVIEW

Baiju Joy elaborated KOHAwhich is Open Source software was developed initially in New Zealand by Katipo Communications Ltd. KOHA was created in 1999 by Katipo Communication for Horowhenua Library Trust in New Zealand and the first installation went live in January,2000 KOHA is released under the GNU General Public License and available to download[2]. 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. Modules available in KOHA are Acquisition, cataloging, Circulation, Serial control, Report, OPAC and Administration for library automation. Whereas LIBSYS a commercial software i.e. Firm-ware ILMS developed and marketed and technically supported by LIBSYS Corporation, New Delhi is a fully integrated and multi user library and information management system. LIBSYS is completely a menu driven system and was developed in C language and it has 8 modules like Acquisition System, Cataloguing System Circulation System, serial control, Article Indexing System, OPAC System. Further as far WEBLIB is concerned it was maintained and supported by eSoftSolutions and it is Free-ware type of software and it has 12 Modules used as Integrated Library management software which is mostly used in academic libraries. Through this paper of comparative analysis it will be helpful to explain the Utility, advantages and disadvantages among the above maintained softwares.

Scope and Limitations of the study

The scope of present study is confined toWEBLIB which is not famous worldwide andLimited to some areas around 25 to 30 Libraries whereas KOHA and LIBSYS both softwares are worldwide known. Different qualities of KOHA, LIBSYS andWEBLIB softwares have been compared only.

Introduction of WEBLIB
WebLib is anintegrated; multi-user, multi-tasking Library Automation Software which is maintained by esoftsolutions and it is Free-ware type of software which is fully Web-Based.WebLib helps in Acquisition and cataloguing books, question papers, articles, reports, pamphlets, serials publications and thesis etc. cataloguing is compatible with international standards which is beneficial for information exchange and data sharing between other libraries. Processing and retrieval of the data is simple, fast and efficient. WebLib has 12 Modules for House-Keeping Operations which are required for automating Academic Libraries. These modules are independent from each other but they still integrated with one another on a common platform. In WebLib we can open and operate all the modules of software at the same time on the same desktop. WebLib is very easy to operate as only 2days (free onsite) training is required. WebLib has some distinguished features as mentioned below:

Special features of WEBLIB
1) WebLib is a Web-Centric Library Automation and Digitization Software. This software will be provided free of cost by sending the filled request form.
2) It is Biometrics Finger-Print Supported with unlimited Fingers.
3) Students and Staff Portal will be created automatically.
4) It has Web-OPAC facility (Advanced Search for Books, Periodicals, Thesis/Project Reports, NBM with any angle. Download the Previous Question Papers, Syllabus, Newspaper Clips etc)
5) Users can check the own status, Issued Document, Returned Document Detail as well as fine detail (Deposited and Pending) throw online.
6) SMS/Email Alerts facilities on every transaction, Periodical Reminder, Over-Due Documents Reminder, Sent any type of Notice for Student/Staff.
7) Any kinds of Documents can be Issued/Returned.
8) Live Photo and Finger capturing of Members within second from any client machine.
9) Automatic Identification of the documents/Members on Library Gate-Entry.
10) A full featured modern integrated library management software (ILMS).
11) Inbuilt Barcode facility, Spine Label (CallNo, Title+Author) Generating software for print on Laser Printer.
12) Two way fine collection module (taken by library OR taken by Account Office).
13) Other fines charging facility such as Mobile Using, any damaging, misbehaving, Book-Binding, Book-tearing etc. from the users.
14) Alarm alert system for suspended Members and document not issued at Library Gate Module.
15) It is Web-Centric application with ASP.NET as front end and Sql-Server 2016 express

edition as back end and Adobe-Flash, AJAX, JavaScript, Jquery, HTML, C# languages are used.

16) Report customization facility and it can be exported in MS-Word, MS-Excel, PDF.

17) Dynamic report (create custom report at run time).

18) Advance Stock-Verification Module (All Stock-Verification Record Saved for future record) based on Barcode Technology.

19) Comprises all house-keeping operation with 12 modules.

20) WebLib is based on client-server architecture.

21) Web-OPAC will be based on resource sharing of all documents to all organizations students which is used WebLib software.

22) It runs over any TCP-IP networks.

23) Library staff can be access only the authorized modules and pages of the software which it has allotted by the Authority/Librarian.

24) Authority/Librarian can be Created Unlimited Housekeeping Users.

25) Mobile/ Tablet/ PC Responsive Software

Hardware and software configuration for a library to implement WEBLIB software:

Requirement for OFFLINE-SERVER (Onsite):

1) IBM/ Lenovo Server: System X 3550 M5 Mid- End / OPEN BAY 2.5 " Hot Swap SAS / SATA MULTI BURNER / Integrated RAID 01 (M5210)¬

2) Processor: Intel xeon 2.5GHz dual core V5 and above¬

3) 16 GB RAM¬

4) Internet Connection with one Static IP and 10mbps (1:1) or above¬

5) HDD: 2x1TB (7.2K NL SAS 2.5") with RAID-1 or above (as per requirement)¬

6) Operating System: Windows-Server 2012-R2-Std OR 2016-Std with MS-SQL-SERVER 2014-Std OR 2016-Std and above¬

7) Quick Heal Antivirus (Server Edition)¬

8) Server Rack 27U (Comrack/Dlink)¬

9) Display LED Screen 18.5", Keyboard, Mouse¬

10) Firewall device (10 Users) for Security¬

11) Online UPS 1KVA (Battery: 150AH * 3No.)¬

12) External HDD 1TB for Backup purpose¬

Requirement for Client PCs:

1) Operating System: Any¬

2) Internet Connectivity for Client Machine with 4mbps(1:1) or LAN Connectivity¬

3) Adobe Reader for PDF (Latest)¬

4) Adobe Flash Player (Latest)¬

5) Microsoft Office (MS-Word, MS-Excel)¬

6) Barcode Scanner: CCD/Laser¬

7) Laser Printer HP1020 plus for Barcode Printing¬

8) Color Laser Printer for Identity Card Printing.¬

9) PVC Cards and Lanyard with Holders for Student and Staff Identity Card¬

Detail of Modules of WebLib:

WebLib consists of the following 12 modules. Each module has further been divided into sub modules to cater to its functional requirements:

1) Administration Module
2) Master Module
3) Acquisition Module
4) Cataloguing/Technical Module
5) Membership/Patron Module
6) Circulation Module
7) Serial Module
8) Gate-Entry Module
9) Report Module
10) Web-OPAC Module
11) Backup Module
12) Email/SMS Module

Administration Module
➢ Library detail
➢ System Parameter
➢ Document Issue/ Fine Policy
➢ Letter Heads/ Text
➢ Log File record
➢ Add Library Rules & Notice
➢ User- Security to Library staff and students
➢ Add image/ Photos

Master module
➢ Book entity management
➢ Member entity Management
➢ Serial entity Management
➢ NBM entity Management
➢ Thesis entity Management
➢ Vendor Management
➢ Publisher Management
➢ Book data import
➢ Member data import
➢ SMS template

Acquisition Module
➢ Queries related to document purchase has to be listed
➢ List of selected vendors
➢ Invoices received according to purchase order
➢ Various reports generated by the system
➢ Titles matched with Invoices received
➢ Payment request
➢ Exchange rates for various currency
➢ Overdue notices

- ➢ Accession register entries
- ➢ Can add thesis, syllabus, question paper, book bill detail along with book enteries
- ➢ Update facility for further correction in case of wrong entry
- ➢ Missed accession number could be ruled out

Cataloguing Module
- ➢ Bibliographic data available in standard exchange format
- ➢ Add class number/Book number
- ➢ Data import/ Export
- ➢ Stock verification
- ➢ Barcode generation
- ➢ Rack allocation for books
- ➢ Update by single or table

Circulation Module
- ➢ Membership registration
- ➢ Change membership status
- ➢ Book security
- ➢ Photo finger update
- ➢ Automatic SMS sent for registration
- ➢ Inbuilt student/ staff search option

Serial Module
- ➢ Periodical Master Entry
- ➢ Periodical Payment Entry
- ➢ Newspaper Master Entry
- ➢ Newspaper Payment
- ➢ Newspaper Clipping

Report Module
- ➢ Main Register Report
- ➢ Technical Module Report i.e. Stock Verification report
- ➢ Circulation Report
- ➢ Serial Report
- ➢ Member Report
- ➢ Gate Entry Report
- ➢ SMS/ Email Report

Gate Entry Module
- ➢ Document Gate Entry
- ➢ Member Gate Entry

Email/ SMS Module
- ➢ Email
- ➢ SMS

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S.No.	Description	WEBLIB	KOHA	LIBSYS-5
1.	Maintained and Technical support by	esoftSolutions and Technical supported by eSoftSolutions	Maintained by Private Vendor and no technical support only Operational Support is being provided	Maintained by LIBSYS Corporation and supported technical by LibSys Corporation
2.	Software-type	Free-ware	Open-Source	Firm-ware
3.	Technology used	ASP.NET C# with MS-SQL-Server	Perl with My-SQL	C,C++ with MS-SQL-Server
4.	Technical support & Customization charges	15,000/Annually	20,000/Annually	50,000/Annually
5.	Data import from MS-Excel	Free	0.50/-each Book	3/-each Book
6.	House-Keeping Modules	12 Modules	7 Modules	8 Modules.
7.	Synchronization with Offline to Online	Yes	No	No
8.	Advanced Stock-Verification Module	Yes	No	No
9.	Over-Due Reminder Facility	Yes (SMS/Email both)	Yes (Email only)	No
10.	Spine Label Print facility	Yes	No	No
11.	Live Photo capturing	Yes	No	No

CONCLUSION

Comparison of working parameters of Freeware software WEBLIB vis-à-vis high cost paid softwares gives it a clear edge over other Library automation softwares used in Academic Libraries. Though KOHA is free but it has some limitations as lack of technical support, irregular up gradation and its tedious installation discourages the library professionals. The WEBLIB being developed by a Librarian itself is an apt solution to Academic Libraries for Library Automation as it has more features and modules than other well known ILMS and it can be installed at reasonable, affordable cost for colleges/ small Academic institutions. The ease of work, operability, prompt technical back up and amenability to modification as per requirements makes it a preferred choice over other softwares.By using Freeware software i.e. WEBLIB in the library, money that otherwise would be spent on software solutions can be used for other important resources, such as purchasing books, journals, etc. In addition, this Local made software is constantly being updated, changed, and customized to meet the library's needs.

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