



Prospects of using Open Source Library Management Software

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Abstract

This paper presents several examples of open source software and commercial software and its comparison. Here we focused on various workflow of open source and commercial software and introduced how the open source option is easy and reliable for library and information centers.

Keyword: Library Management Software, Open Source Software, Library Automation

Introduction

Information is now considered as an essential resource for all round development of the society. Libraries are an important component of every educational institution, which are hubs of the teaching, and learning activities where students, researcher and teachers can explore the vast resources of information. Library is an organization, which identifies, selects, collects, process, store and disseminates information at right time to the right person. In the traditional libraries users have to spend more time for searching a small piece of information and for that have to depend mainly on the library professional or library staff.

Now in information era, library professionals should apply the advanced technologies to make their user community satisfied in order to avoid obsolescence of information. In this age of information communication technology, computers are being used for day-to-day housekeeping activities of the library which saves the time of the end users, and library professional also and at the same time avoid duplication of work and make the library service smooth and effective. Although computers play very important role in the automation of libraries, application of telecommunication and reprography technology is also equally important. The word “automation” has been derived from Greek word “automose”. “Automose” means something which has power of spontaneous motion or self-movement. The term “automation” was first introduced by D.S. Harder in 1936 (Tanwar, 2014). Automation is a technological change that replaces human being with machines.

According to The New Oxford Dictionary of English (2002), automation is, “the use or introduction of automatic equipment in a manufacturing or other process or facility”

The New Encyclopedia Britannica (2005) defines automation as “the application of machines to tasks performed by human beings or, increasingly, to tasks that would otherwise be impossible”. In simple words, automation is the use of machines or technologies to optimize productivity in the production and delivery of services. Library automation is the use and application of computers and utilization of computer based products and services in operating different library housekeeping operations and functions in order to replace the traditionally practiced operations. Automation of library functions has revolutionized library activities. It

enables libraries to provide an effective service while saving the employee time by transferring low-level, repetitive operations to a machine.

The need for Automation is emphasized because of the following factors:

- Traditional methods of handling the library documents as well as information are not adequate due to their growth rate.
 - In manual system it is a time sharing job of updating the information due to voluminous increase and rise in the degree of specialization involved and also it consumes a huge human resource.
 - The need for co-operation and resource sharing among the library and information centers to achieve the institutional goals also triggers the Automation job.
 - Automation reduces repetitive clerical work, thus saves the time of the staff.
 - In automated system information retrieval is far speedier than manual one.
 - Automation improves the control over the entire library operation efficiently.
 - The main activities and services of library automation are as follows)
 - Information Resource Building
 - Classification and Cataloguing
 - Circulation Control
 - Serial Control
 - Documentation and Allied Services
 - Information Retrieval
 - Access to Database comprising of CD-ROM Services, Online search and E-mail & Internet access
- Automation of the housekeeping operations of a library and information centre is a vital and essential step and hence, planning and implementation of library automation should be carried out very carefully.

The following are the main aspects of library Automation -

Planning: Planning enables the library to address its present and future needs within budget constraints. It ensures the success of the automation project. To be able to plan effectively, data about the library and its users must be collected. This is the systems analysis phase. The results of this phase will provide data to make decisions about automation.

Finance: When planning for library automation and networking sufficient funds has to be provided by the institution or the funding agencies for purchasing of hardware, software, furniture etc. It should be noted that if sufficient funds are not available for purchasing the entire software, then the library should automate only those areas, which are of utmost importance and then later on go for overall automation modules.

Computer hardware: Hardware procurement is an important step during the automation process and it should be carried out by the librarians looking at the budget as well as the latest technological aspects. It is very common phenomena that due to new kinds of hardware available in the market the earlier ones are getting outdated soon. Also, in the hardware procurement step, it should be carefully noticed whether the software which a library and information centre going to implement will be compatible with the hardware or not.

Computer software: It is one of the most important components which should be taken notice of, while automation. There are different types of library software manufactured by different companies and institutions, each of which has distinct features.

Staff training: To provide effective and efficient services to the users, the staff should be provided training about the computers, how to work on computers, and the essential features of the software adopted and how the software is used.

User training: To provide effective and efficient services to the users, the users should also be provided training about the computers, how to search in the OPAC, and the essential features of the software used.

Library Management Software (LMS)

In the early library software packages developers have concentrated on some particular library operations like basically cataloguing and circulation. One of the good example is CDS/ISIS software developed by UNESCO was a bibliographic software, which concentrated on the cataloguing part. Recent library automation systems are integrated Systems based on relational database architecture and in such systems the files are interlinked so that deletions, additions and other changes in one file automatically activate appropriate changes in related files. These are known as Integrated Library Systems (ILS) and the other term often used to describe is Library Management Software (LMS) (Salter, 2009). An LMS system supports selection, ordering, acquisitions, labeling, cataloguing and circulation control of library stock; also serial control and user services like inter library loan, information services.

In recent years, numbers of commercially developed Library Management Software packages are available. LIBSYS, SOUL, SLIM, Alice, Librarian, Easylib , Sanjay, Techlib Plus, Library Manager, LIBMAN, LIBRIS, MAITRAYEE, OASIS, TULIP, WILISYS, etc are a few examples of such commercial packages.

An alternative to commercial package is freeware. Freeware refers to software or software packages that the software copyright owner gives away the software for free of cost). It can be used by anybody for non-commercial purposes. e-Granthalaya is such type of Library Management Software developed by NIC (National Informatics Centre), Department of Information Technology,

Government of India. Another notable example of freeware LMS is WEBLIS, developed by UNESCO and Institute for Computer and Information Engineering (ICIE), Poland. WEBLIS is a Web based Library Integrated System based on CDS/ISIS.

Open Sources Software

There is another kind of free (freedom of modification) software called the open source software (OSS). Software is said to be open source if the full source code of the software is available publicly with no constraints on how it can be used. These open source library software are freely distributed through internet to the users. Koha is the first open source software for library management, and was developed initially in New Zealand in 1999. Today, several open source LMS are available. Some important open source LMS are- Koha, NewGenLib, Evergreen, OpenBiblio, Php,Open Blio, etc

Open Source Software (OSS) and its implications in Libraries: Open source software is also called as, particularly in Europe, “Free/Libre or Open Source Software” (FLOSS). But, the most widely used term seems to be “Open Source Software”. Kavanagh explained open source software as “software that must be distributed with source code included or easily available, such by free download from the internet. The source code should be in the same form that a programmer would actually use to maintain it; not for instance or intermediate code form”. Open source movement was started by Richard Stallman in 1983 and the term “Open Source” was given by Christine Peterson in 1997. The Open Source Initiative (OSI) is a California based public benefit corporation, founded in 1998. The OSI are the stewards of the Open Source Definition (OSD). When an author contributes code to an open source project they do so under an explicit license.

Open Source Initiative has approved approximately 75 different licenses as meeting the criteria of the organization . Some examples of such license are GNU Public License, BDS License, Apache License, MIT License, Mozilla Public License, etc.

There is today very useful OSS starting from the different Linux Operating Systems, Apache Web Server, MySQL and Postgret SQL RDBMS in general to LIS-specific software like, Library Management Software (LMS) such as Koha , Evergreen, NewGenLib , etc. and Digital Library Software such as DSpace, E-prints, Fedora, GSDL ,etc. No doubt the hardware costs have to be borne by libraries but the availability of efficient OSS has considerably cut down the software costs. The quality of open source software in the field of

LIS is rising day by day, because they go through an informal review process by a strong user community and LIS specialists. Open source Digital Library Software, E-learning Management and Content Management Software have already dominating upon commercial software. The major advantage of open source software is interoperability. But in the case of LMS still there is obstacles because open source LMS needs higher level of technical knowledge to install and maintain it, and in this regard library professionals in general are lacking behind.

At present, selection of LMS package has become the most critical one; there is few evaluated standard software in the field. Chudnov (1999) explained the situation as “library community is largely made up of not-for-profit, publicly funded agencies which hardly command a major voice in today’s high tech information industry. As such, there is not an enormous market niche for software vendors to fill our small demand for systems.”

Open source software systems cost nothing or very low cost to use, whether they have one or one thousand users. On the other hand few people are engaged with a commercial LMS package development, whereas a large pool of community developers are engaged with an open source LMS package. Hence, open source LMS are seen as a solution in the age of economic global meltdown because many libraries experience with commercial LMS that is slow to evolve and expensive to upgrade. Rather than spending lots of money on commercially licensed software and also for their maintenance , such funds might be reallocated for training, hiring, or support needs, areas where libraries tend toward chronic shortfalls. In the last few years we have seen the development of a number of LMS products in the open source world. But, there is no vendor responsibility for the software support for open source LMS can vary, and often depends on the user/developer community’s commitment to the project. The level of technical knowledge needed to install and maintenance of open source software LMS packages can also be a barrier to its use for the LIS professionals Keeping in mind the above issues relating to open source LMS .

Koha: Among open source LMS, Koha is the first open source and broad featured LMS licensed under GNU Public License. it is seen that popularity of Koha is increasing day by day in India .In North East India, North East Hill University(NEHU), Shillong, Meghalaya; Rajiv Gandhi University, Rono Hills, Arunachal Pradesh and Assam University, Silchar, Gujarat have successfully implemented Koha open source LMS for library automation and converted the database from other proprietary package they were using earlier. Koha is selected as the model open source LMS because of its very strong functionalities and standardization for automation of library and information centres in today’s context. At the end a model has been proposed to design the Union Catalogue of the College and University, which will be a prototype in the Region of India.

D-space : D-space was first released on the year 2002.which was developed by MIT and HP open sources application that foundations and associations with moderately couple of assets .D-space acknowledges all way of computerized positions.

Evergreen: Evergreen ILS is another choice while investigating open sources ILS alternatives . created by Equinox software . it is utilized OPAC interface , customiazations and it light of a fact that it open source.

Open Bilio : Open Bilio is an easy to use open sources library automation written in PHP. Easy to install with minimal expertise and designed with common library feature.

New GenLib: New GenLib is an Integrated Library Automation and Networking Solution Developed by Verus solutions Pvt Ltd and Kesavan Information and Knowledge Management, India. ,In march 2005,Version 1.0 was discharged and forms and 2.1 have come up later.

E-print : E-print has been created at the university of Southampton School of electronics and computer science and discharged under a GPL license.

EverGreen : EverGreen ILS is another choice while investigating open sources ILS alternatives. created by Equinox software .it strong, endeavor level ILS arrangement created to be equipped for supporting the workload of vast libraries in a blame tolerant framework.

Conclusion:

Open source is very similar to the principles and practice of modern librarianship OSS is essential if a librarian wants to develop software and system to fulfill the patrons need. both aims at promoting human understand and to make our lives better. with open sources software the IT Infrastructure that is essential to library operation and service can be construct according to release standard with other essential software and system.

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