Article

Automation of Library and Information Centres With Open Source Software

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I N F O

A B S T R A C T

This article is describing use of automation with open sources of water in library. The library is an ever-growing centre is construction of the present library is not going to be completed in the future. This paper shows that automation and open source software should be used in the library for all the library materials which are difficult to maintain. The benefits of automation and the use of open source software are also explained in this paper. Major librariesare use KOHA open access to tware in library.

Keywords: ICT, Automation, Open Source Software (KOHA), Proprietary Software (Lybsys)

Introduction

Higher education's success depends on a well-developed library system that is easily accessible at every department in the college/University. A library plays an essential role in academic areas. Library and information centers were providing excellent information and services to their users. A libraryisaplaceforcollectingallprintedmaterialsaswella snon-print material. Old libraries like (King - Maharaja) all around the world kept his important material safe so readers could not consume the material. Readers, reading material, and staff are three elements of the library. The essential purpose of the library is to store knowledge and information. The reader comes to use the materials in the library in addition, has to return within a certain period. In modern times, the concept of a library has changed to become an exchange of information as readers ask for e-resources without asking for a book. The nature of the new library is becoming computational. Today digital libraries are expanding this concept. Many new ideas are available in the library. Various type of libraries exists corporate library, Industrial library, academic libraries, Public library, etc. People can avail themselves this library on time and according to their interest. Today libraries are also created on a personal level.

Dr. S. R. Ramanathan's fifth law Library is a growing organism. It is challenging to run a library, combining both new and old material. Libraries and information centers are currently using automation systems because of the library's automation; every reader will have the materials or information they want as soon as possible. At present, the IT section is steadily improving. Rapid improvement in all areas is now taking place in the library and information sector as well. Since the younger generation is the highlight of mobile, they use IT base equipment. The information available in the library and information area becomes available to the readers, and it will increase the library's readerships. If databases and resources in the library are made available to readers on a secure website, a different relationship between the library and readers will be created, and the reader's view of the library will change. Automation and open source software are two essential factors for stopping the library's expansion to a particular location due to insufficient space. Automation and open source software play an important role in enhancing the library's readership and literature capabilities. The library contents can be easily accessed from one library to another using open-source software due to the automation. Therefore, different materials are available in the library. Thus, the

11

Desai RG
J. Adv. Res. Lib. Inform. Sci. 2021; 8(2)

madness of modern equipment created by readers is a timely necessity for the use of automation and open-source software in libraries and information centers.

Information Communication and Technology (ICT)

ICT application is an essential part of digital libraries. ICT application has been used in library felids since the 1950s, and information and communication technology have been changing the traditional libraries and transforming them into digital libraries. With automation happening all over the world, all the tasks happen faster. Increased mechanization has led to the use of ICT in the library. Due to the use of ICT applications, all the library work can be completed in a short time. Automation makes it easier for readers and library staff of the materials that readers want in less time. The use of ICT has given a different momentum to libraries' development and changed the way readers look at libraries. In the present era, ICT adoption is required if we want to survive in any field. Academic libraries use the most common application in the library, for example:

- Communication tools: e-mail, phone calls, visual conferencing, internets, and telephonic conferences
- Purchase online database and Library software.
- Social sites, online communities, blogs, and online networking sites

Library Automation

Automation utilizes types of machinery in the library for effortlessly accomplishing the library work and saving the library staff power and time. The main aim and goal of library automation are free the librarians and library sub staff to do the extra work and develop their information and knowledge. Library automation is the most useful technology develop and design to minimize human intervention in the library. The library is an essential part of the academic field. Its usefulness can be further enhanced by mechanizing the library. The library mechanics have to consider the library's necessary study, analysis of needs, design of methods, development, inspection, use, actual work, and observation. Two main areas of library mechanization one is library housekeeping, and another one is library service activities.

Library Housekeeping

Acquisition	Circulation	Stock taking
Classification	Catalogue	Serial control

Library Services Activities

Index Service	SDI	Information Handling	Xerox service
Documents Service	CAS	Retrospective search system	Translation service

Inter library loan service	Abstract services	Bibliography service	Reference service

Library Software (Open Source Software and Proprietary Software):

All library software has some common international standers like "MARC21, Z39.50, AACR2, NCIP 2.0" etc. "Library software have some functional modules like Article Indexing, Acquisition, Administration, Cataloguing, Circulation, OPAC/web-OPAC" etc. It is "multi-currencies, multi-user & multi-lingual using UNICODE technology" in library software. RFID & Bar-code options are also available in the library software development process. The library is a growing organism. Due to the lack of adequate space for the library's growing material, the library has been mechanized and computerized. There are two types of software in the library area: one is open source software, and the other is proprietary software.

Top Two Proprietary Software

- **SOUL:** SOUL software develop by INFLIBNET center. SOUL software's first version has been released in Feb-2000 and develops various utilities and some updates in 2007. The INFLIBNET decided to upgrade a new version of SOUL, acquire new technology updates, and released SOUL 2.0 in Jan-2009; SOUL provides six library tools catalog, acquisition, serial control, circulation, OPAC, and administration
- **Libsys:** Libsys is the most essential and popular proprietary library software in India, having more than 1200 installations in different types of libraries. British council divisions of south Asia, to provide library automation and library services for its libraries. Libsys is an integrated library management software develop in C and C++ programs. Libsys software provides some essential library tools: "Acquisition, Catalogue, Circulation, Serial Control, Article Indexing, and Online Public Access Catalogue (OPAC)

Top Two Open Source Software

1. **Koha:** Koha is the world's best open source library automation software, used by over 3,000 academics, public, and special libraries worldwide. Koha has all the modules you would expect in a fully functional librarysoftware acquisition, serials, members, circulation, cataloging, reports, and tools.
2. **DSpace:** DSpace is the second no open-source software in library professionals it uses in academic and commercial organizations. Installation of DSpace can install very easily and free of cost. "DSpace preserves open access digital images, moving images, text, mpegs and datasets " etc.

Desai RG
J. Adv. Res. Lib. Inform. Sci. 2021; 8(2)

12

Comparison between Open Source Software and Proprietary Software

Open Source Software	Proprietary Software
Develop and tested through open collaboration.	Develop this software's by the individual or the organization.
Anyone have academic knowledge can access open source software code.	Only owner and publisher can access software code.
Software managed by open source community of developers and programmers.	This software's managed by a group of individual or team that develop it.
It provide better flexibility which means more freedom which encourage innovation.	Limited scope for innovation with the restrictions.
Example: Koha, D-Space,NewGenLIB, Evergreen, Greenstone, E-print, Apache etc.	Example: Libsys, SOUL, MIS, SLIM, Autolib, Libsuite, Librarian, Easy Lib etc.

Conclusion

The importance and usefulness of automation and library software has been outlined in this paper to manage the library's growing content properly. Library automation and library software play an important role in making the library's tasks easier and faster. Readers use library software to find library materials. Automation and library software saves time for library staff and readers and increases library readers' numbers. In the modern era, automation has become necessary in libraries and information fields due to industrialization in every area. Increased automation is causing readers to ignore the printed material. Through automation and library software, we can create awareness among readers about books and libraries.

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