A Comparative Study Of Open Source Software And Proprietary Software In Libraries

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Abstract

Open Source software is gaining momentum. The demand for Open Source software is rising very fast; nowadays thousands of individuals and organizations are running Open Source programs on their systems. In this chapter we learn about the Open source software (OSS) and proprietary software; history, meaning, comparisons, merits and demerits and discusses the reasons why the librarians and the libraries need the Open source software (OSS) in current scenario.

Keywords: Open Source Software, OSS, Free Software, Proprietary Software, General Public License.

1- INTRODUCTION

Open Source Software (OSS) is generally acquired freely and manufacture or developer has no right to claim royalties on the distribution or use. Source code is accessible to the user and distributed with the software. It has provision of modification and derivations under the programs original name and rights of facilities attached to the program must not depends on the program's being part of a particular software distribution. The main part of OSS is distribution of license should not be specific to a product and license should be technology neutral.

There is some software whose source codes is developed by individual person, team or organization and maintains, modify and control over it. This type of software is called "proprietary" or "closed source" software. Only the real author of proprietary software can legally copy, inspect, and alter that software.

In order to use proprietary software users must agree by signing a license displayed the first time they run software. Without the permission of author of software users will not do anything with the software. Adobe Photoshop and Microsoft Office are examples of proprietary software. Open source software is different. Its authors make its source code available to others who would like to view that code, copy it, learn from it, alter it, or share it. KOHA and the GNU Image Manipulation Program are examples of open source software.

As they do with proprietary software, users must accept the terms of a license when they use open source software but the legal terms of open source licenses differ dramatically from those of proprietary licenses.

2- HISTORY

In 1997, Eric Raymond published The Cathedral and the Bazaar, a reflective analysis of the hacker community and free software principles. The paper received significant attention in early 1998, and was one factor in motivating Netscape Communications Corporation to release their popular Netscape Communicator Internet suite as free software. This source code subsequently became the basis behind SeaMonkey, Mozilla Firefox, Thunderbird and KompoZer.

Netscape's act prompted Raymond and others to look into how to bring the Free Software Foundation's free software ideas and perceived benefits to the commercial software industry. They concluded that FSF's social activism was not appealing to companies like Netscape, and looked for a way to rebrand the free software movement to emphasize the business potential of sharing and collaborating on software source code. The new term they chose was "open source", which was soon adopted by Bruce Perens, publisher Tim O'Reilly, Linus Torvalds

, and others. The Open Source Initiative was founded in February 1998 to encourage use of the new term and evangelize open-source principles.

The free software movement was launched in 1983. In 1998, a group of individuals advocated that the term free software should be replaced by open-source software (OSS) as an expression which is less ambiguous and more comfortable for the corporate world. Software developers may want to publish their software with an open-source license, so that anybody may also develop the same software or understand its internal functioning. With open-source software, generally anyone is allowed to create modifications of it, port it to new operating systems and processor architectures, share it with others or, in some cases, market it. Scholars Casson and Ryan have pointed out several policy-based reasons for adoption of open source in particular, the heightened value proposition from open source (when compared to most proprietary formats) in the following categories:

- Security
- Affordability
- Transparency
- Perpetuity
- Interoperability

3- WHY OPEN SOURCE SOFTWARE FOR LIBRARIANS / LIBRARIES

The basic motive behind open source software is very easy and simple; when the software source codes are free for reconstruction and modification to improve the quality and services of software. And librarian can also able to modify the open source software according to our requirements for the smooth functioning of the library services. And it also reduces cost in budget. To choose open source because it gives you the freedom to use, change or distribute the way you want. Remember, libraries are expected to stay much longer than the vendors. Vendors may not help a version which they sold you a period of time ago. Or they may go out of business. In that case, all your work and investment go waste. You may be forced to migrate to another version or software. With Open Source, you know what it all contains. You may change it yourself or hire personnel to do so, but then it is always with you. You can make it to evolve for your

library's evolving needs.

4- OPEN SOURCE SOFTWARE FOR LIBRARIES

There are some of open source software which has been used by the libraries for their smooth functioning and quality services. And make the library technical work easy.

 Evergreen, a highly-scalable software for libraries that helps library patrons find library materials, and helps libraries manage, catalogue, and circulate those materials, no matter how large or complex the libraries. Evergreen is open source software, freely licensed under the GNU GPL.

 Koha, the open source software library automation package (ILS).There is no need to install a desktop client to access staff/library functionality. As such, it is constantly growing and improving.

 OpenBiblio is an easy to use, open source, automated library system written in PHP containing OPAC, circulation, cataloging, and staff administration functionality. The purpose of this project is to provide a cost effective library automation solution for private collections, clubs, churches, schools, or public libraries.

 NewGenLib (NGL) is an outcome of collaboration between Verus and Kesavan Institute of Information and Knowledge management. NGL is developed and maintained by Verus Solutions and Kesavan Institute has provided the domain expertise. It provides many basic ILS functions as well as having several social media functions built in.

 ReservesDirect is free, open-source software that manages electronic and physical library materials reserved for university courses. It contains staff interfaces

for uploading or creating reserves and managing courses, instructor interfaces for uploading and managing electronic reserve materials directly, and student interfaces for viewing reserve materials from the web and on mobile devices. While electronic reserves can be used out of the box, use for physical library reserves will require additional integration work with your institution's integrated library system.

EPrints is a free and open-source software package for building open access repositories that are compliant with the Open Archives Initiative Protocol for Metadata Harvesting. It shares many of the features commonly seen in document management systems, but is primarily used for institutional repositories and scientific journals. EPrints has been developed at the University Of Southampton School Of Electronics And Computer Science and released under a GPL license.

5- PROPRIETARY SOFTWARE FOR LIBRARIES

Proprietary software is software that is owned by an individual or a company (usually the one that developed it.) There are almost always major restrictions on its use, and its source code is almost always kept secret. There is some proprietary software given below.

Insignia Library System: The Insignia Library System is a full-featured library system. It is web-based with simple point-and-click navigation; the system is easy and fun for library patrons and staff. The Insignia Library Automation System is designed with a consistent, intuitive interface. You can explore the entire system with just a few mouse clicks, yet behind the simple interface lays a powerful database engine

capable of maintaining millions of records.

Mandarin announces the release of M5, a modern online catalog, fully web based, and the first of many updates in development. Like previous versions of Mandarin, M5 provides access to library resources from any workstation, at the library or remotely. M5 helps single libraries, libraries with multiple sites and school districts lower costs and save time with one-point installation, maintenance and updates.

LIBSYS: A modular web-based library automation system**.** It is an integrated library management software package designed and developed by Libsys Corporation, New Delhi. It covers all the activities concerned with library management like acquisition, circulation, cataloguing, serial control, article indexing, abstracting, OPAC.

ResourceMate provides comprehensive cataloguing, searching and circulating software as well as unmatched technical support to not only libraries, schools, churches, museums, government, medical/nursing - but any organization that needs to be organized.

Lib-Portal is an internet library management system (ILMS). Lib-Portal can help enrich the information and services delivered to subscribers, assure greater efficiency in librarian working processes and dramatically reduce library purchasing and maintenance costs. It has the ability of a central catalog for a chain of libraries and branches. The platform is multi-language and allows each library to manage its relevant terms and thesaurus.

LibGuru is one of the best library management software. Features of LibGuru includes: multi-user and multi-lingual,

usage of visual basic, MS Access and SQL Server, compatible with latest RFID technology, compatible with bar-code technology, completely graphical user interface, single data entry approach, robust interface with MS Office components, communication via email, etc. easy installation and maintenance, and many more.

6- MERITS OF OPEN SOURCE SOFTWARE

1. Its generally free; it has been estimated that open source software collectively saves businesses $60 billion a year. These days for virtually every paid for proprietary software system you will find an open source version.

2. It's continually evolving in real time as developers add to it and modify it, which means it can be better quality and more secure and less prone to bugs than proprietary systems, because it has so many users poring over it and weeding out problems.

3. Using open source software also means you are not locked in to using a particular vendor's system that only work with their other systems.

4. You can modify and adapt open source software for your own academic requirements, something that is not possible with proprietary systems.

7- DEMERITS

1. Because there is no requirement to create a Proprietary/ commercial software that will sell and generate money, open source software can tend to evolve more in line with developers' wishes than the needs of the end user.

2. For the same reason, they can be less "user-friendly" and not as easy to use because less attention is paid to developing the user interface.

3. There may also be less support available for when things go wrong – open source software tends to rely on its community of users to respond to and fix problems.

4. Although the open source software itself is mostly free, there may still be some indirect costs involved, such as paying for external support.

5. Although having an open system means that there are many people identifying bugs and fixing them, it also means that malicious users can potentially view it and exploit any vulnerabilities.

8- DIFFERENCE BETWEEN OPEN SOURCE SOFTWARE AND PROPRIETARY SOFTWARE

It is very easy way to understand the difference between open source software and proprietary software.

Open Source Software	Proprietary software
Purchase with its source code	Purchase without its source code
User can get open software for free of charge	User must pay to get the proprietary software
User can modify the software	User cannot modify the software
User can install software freely into any computer	User must have a license from vendor before install into computer
No one is responsible to the software	Full support from vendor if anything happened to the software

9- CONCLUSION

The Open source software (OSS) and Proprietary software both have their own importance and values. Open source software is replacing the proprietary software because of their free license and its codes distributions. OSS has much potential for libraries and information centers, these concepts and their benefits and importance to libraries should be examined and explored for the wider audience and prospects for long-term preservation of scholarly works.

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