Chapter 46 Selection Process for Free Open Source Software

David William Schuster

Texas Woman's University, USA

ABSTRACT

This chapter will discuss concerns a library may consider in selecting Open Source software. The author will review all aspects of a needs assessment, along with considerations for the sustainability of an open source project. Discussions about technical abilities, identify options a library might consider, installation and usability issues, and getting involved with an open source community. There are ways a library can get involved with open source software and contribute to a community without providing programming. Going with open source can help save money, but also help the library decide the direction it wants to keep its community engaged.

INTRODUCTION

For decades, libraries relied on proprietary software. In the early 2000's there was a shift in thinking and the development of more open source software came about. Libraries continue to become more sophisticated in their knowledge of systems and abilities. Changing service models require new software and ways of thinking about how we serve our constituents. Spending thousands of dollars with a proprietary software vendor only to not get the software functionality needed may not suit the library of the future. Open source software helps to fill that void and allow you to reimagine the library and its services for the future.

Libraries have always been trying to provide access to resources such as books, unique collections of materials, objects, and electronic resources. Through the years, changes in technology have allowed us to evaluate services and engage our communities with new innovations. How can libraries draw our community in for a new experience when they barely look up from the device in their hand? With shrinking budgets and limited resources, purchasing new systems is not always an option. However,

DOI: 10.4018/978-1-7998-3016-0.ch046

libraries have a will to share and to innovate, making them a natural fit for free open source software. With open source, libraries can design their future, create new functionality, and deploy new features that draw in the community.

How can a library judge if open source is appropriate for them? What process might a library follow to make those judgements? This chapter discusses the considerations a library must evaluate, such as purchasing, technical ability, where to find information, and how to evaluate and participate in an open source community. It isn't always about programming.

Additionally, it is often overlooked that libraries are already using open source software like Apache web server and the Firefox browser, both open source options. Most individuals don't even realize that they are using open source software, mainly because the developers make it work for the user. In this chapter open source software selection in an academic setting will be discussed.

Background

Selecting free open source software is no different from traditional proprietary library software purchases. With proprietary software, the vendor builds in costs for presales work before a contract is signed. With open source software, the vendors cannot build that into the cost of the software as they are selling services and not actual software. The expense and time involved in a request for proposal (RFP) makes it difficult for open source software companies to respond as they can't build the cost of doing presales business into the cost of the product. This means libraries have to do more of their own investigation or hire a consultant to help evaluate systems. (Vivantech, 2013)

Open source software differs in software licensing, support lock-in, maintenance options, documentation, and staffing. Open source software is free to use with no licensing fees, but libraries can pay for a support contract, consultant, initial system setup, or migration from an existing system. The beauty of open source support is the ability to select a software company that the library prefers to work with. There is no vendor lock-in beyond the contract agreement, allowing a library to choose a different support company if desired. The library gets to keep the software without obligation to the original vendor.

In 2014 and 2015 a significant number of libraries selected open source as an option based on calculations from Marshall Breedings' "Procurement Library Technology reports" (2015) specifically for academic libraries. In 2014, 45 academic libraries reported migrations to an open source ILS comprising roughly 14% of ILS migrations. In 2015 there were 42 migrations

to an open source ILS, but the percentage of libraries selecting open source went up to 16% of all ILS migrations. Some of the open source ILS systems libraries migrated to were Koha, Evergreen, and Kuali. (Breeding 2014, 2015)

The ILS is only one type of open source software a library might consider deploying. Repository systems (DSpace, Greenstone), website management (Drupal), blogs (Wordpress), statistical package tracking, archival tracking systems, and discovery systems (Vufind) are just a few software packages libraries might consider using open source software for. Those are some of the major systems in libraries, but there are desktop software applications libraries can use as well. Public workstations could have Open Office or another desktop application installed instead of Microsoft office.

11 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/selection-process-for-free-open-source-software/261066

Related Content

A Meshfree-Based Lattice Boltzmann Approach for Simulation of Fluid Flows Within Complex Geometries: Application of Meshfree Methods for LBM Simulations

Sonam Tanwar (2018). *Analysis and Applications of Lattice Boltzmann Simulations (pp. 188-222).*https://www.irma-international.org/chapter/a-meshfree-based-lattice-boltzmann-approach-for-simulation-of-fluid-flows-within-complex-geometries/203090

A Review on Software Project Management Ontologies

Omiros latrellisand Panos Fitsilis (2021). Research Anthology on Recent Trends, Tools, and Implications of Computer Programming (pp. 27-46).

www.irma-international.org/chapter/a-review-on-software-project-management-ontologies/261019

Big Data and Analytics: Application to Healthcare Industry

Misbahul Haque, Mohd Imran, Mohd Vasim Ahamadand Mohd Shoaib (2018). *Handbook of Research on Pattern Engineering System Development for Big Data Analytics (pp. 55-66).*www.irma-international.org/chapter/big-data-and-analytics/202832

Flow-Graph and Markovian Methods for Cyber Security Analysis

Kouroush Jenab, Sam Khouryand Kim LaFevor (2018). *Cyber Security and Threats: Concepts, Methodologies, Tools, and Applications (pp. 674-702).*

www.irma-international.org/chapter/flow-graph-and-markovian-methods-for-cyber-security-analysis/203531

Consideration of Stress Coping Support System for Prevention of Mental Disease Using Smart Heart Rate Monitor

Hidehiko Hayashiand Akinori Minazuki (2019). *Computational Methods and Algorithms for Medicine and Optimized Clinical Practice (pp. 31-45).*

 $\underline{\text{www.irma-international.org/chapter/consideration-of-stress-coping-support-system-for-prevention-of-mental-disease-using-smart-heart-rate-monitor/223783}$