Motivation for the Adoption of Open Source Software in Kenya Academic Libraries

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Introduction

• Development in information and Communication technology (ICT) is not the only aspect that has impacted library automation. World imperatives such as globalisation, the digital divide and the information society has indicated the directions that libraries should move.

• Open source software is available freely (usually on the web), and the source code is available so that changes may be made as required.

• Open software is useful tool to allow developing countries to leapfrog into the information age.

• Many University libraries today are seeking for visibility of their materials and creating awareness of the importance of accessibility to knowledge. According to Corrado (2005), open source can benefits libraries by lowering initial and ongoing costs, eliminating vendor lock-in, and allowing for greater flexibility.
Research Objectives

1. Determine from the literature the status of academic libraries and government in the use of open software

2. Assess the extent of use of open source in selected academic libraries in Kenya

3. Examine challenges (current and anticipated) of using open source software in academic libraries in Kenya
Research approach, Methodology

• The paper examines and explores the different open source software which University libraries can utilise to remain visible in the face of budget cut and economic meltdown.

• The review identified the present state of adoption of Open source software in University libraries in Kenya. This review also established the challenges facing University libraries in adopting of open source system.

• The insights gained from this paper contribute to the present and future development and utilisation of open source system in University libraries in Africa and Kenya in particular.
• Across the world, governments are increasingly adopting open source software for various reasons (Sharma, 2003; EGOVOS, 2003).
• According to Mutula, (2009), nowadays budgets are tight and since open source software is free and its products have matured, companies are considering its products for their IT solutions.
• South African case as Golden (2004) observes, the growth in open source software industry has led to the arrival of programs that are capable of enterprise class operation and can be considered alongside established commercial products when exploring new software options.
• Data Protection Bill 2012, will lead to proper data protection laws to deal with rising cybercrimes and hence adopting open source.
Selected OSS Adopted in Academic libraries in Kenya

• We’re seeing a great deal of market acceptance of ILS products in the open source arena. This does not necessarily mean that they offer all the nuances of functionality found in their commercial counterparts, only that libraries seem willing to adopt them.

• In broad terms, open source options are now well represented in the ILS products to which libraries are migrating.

• In Kenya three open source ILS products dominate
  - Koha,
  - Dspace
  - Greenstone
KOHA at Pwani University

Koha 3.8 integrated library system

- Circulation
- Patrons
- Advanced search
- Lists
- Cataloging
- Authorities

- Serials
- Acquisitions
- Reports
- Koha administration
- Tools
- About Koha

Tags pending approval: 2
1. Computer or server
2. Windows or Linux operating system preferably 64bit Linux
3. MySQL
4. Perl
5. Basic ICT skills
6. Also basic knowledge in SQL and bash commands is required.
1. Bibliographic database management
2. User’s management
3. Loans management
4. End-user searching on local
5. OPAC
Exam Bank

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2. Video
3. Picture
4. Audio

Dspace Repository Software
Data formats Supported
1. Text
2. Video
3. Pictures
4. Audio
5. Html pages
1. Computer or server
2. Windows or Linux operating system
3. Basic ICT skills

“Easy to install and use”
Challenges of using open source in academic libraries

• **Policies**- According to Huysmans et al., 2008. It is very difficult to support open source if there are no policies in place which will support the use.

• **Complexity**- According to Lian ET. al (2006), The availability of the source code in open source software allows users to modify and make improvements to it, and such contributions could come from a diverse talent pool of programmers.

• **Fainting of morale of programmers**- Luthiger, 2005; Bitzer et al., 2007). Programmers usually only work on projects that they enjoy.

• **License**- Smajda, (2011), the liberal licenses are more permissive with respect to developers who are modifying the code.
Conclusion

Feller (2005), observes that open source software is not without weaknesses. Besides, its celebrated minimal or no cost, it has not yet made a significant impact in the generic desktop applications category, where Microsoft Office, running on the Microsoft Windows operating system, is the de facto standard.

It has been a long journey for University libraries in Kenya to realise automation of its services operating under tight budget allocation. The problem of getting some libraries to adopt open source as noted, is more than technical or political. It is embedded in organizational leadership; it is upon the leadership of University Libraries to take bold step by embracing open source. Kenya as a developing country cannot work in isolation in realising the use of open source, partnership with first world countries like Europe is essential to realise this.
1. Open software projects need to adapt in order to produce systems that can be used by typical and non-technical user.

2. Technical knowledge is needed in order to make the process work correctly or efficiently.

3. Programmers who work on open source systems should be encouraged to consider the issue of usability and where possible to coalesce their system.

4. The libraries intending to use open source software must consider the fact that customization is a critical challenge which when overcome, by assigning a staff to learn and customize the system they become a critical asset to the library.

5. The libraries need to be aware of the open standards available that provide an avenue of interoperability and resource sharing.
6. University libraries in Kenya should utilize open source which they can use to develop and utilize their own (library) websites to not only market themselves and their institutions, but to also make their collections more visible globally. Opportunities presented by the wide visibility should be tapped to generate funds for the library, for example through publishers’ advertisements and charging fees for access to selected local content.