## Chapter 31

# Adoption of Open Source Software in Libraries in Developing Countries

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#### **ABSTRACT**

A survey on the adoption of open source software in libraries in developing countries was conducted. An online questionnaire was sent to Indian Technical and Economic Cooperation (ITEC) and Special Commonwealth Assistance for Africa (SCAAP) participants for the Advanced Certificate Course in Modern Library Practices and the Lib@web participants of the Management of Electronic Information and Digital Libraries programme at the University of Antwerp in Belgium. The ITEC/SCAAP programme is sponsored by Government of India while the Lib@web programme is sponsored by Flemish Interuniversity Council – Belgian Development Council (VLIR-OUS). The data was collected from 31 librarians who attended these training programmes. The findings revealed that most libraries in developing countries which sent participants to these programmes have adopted open source software. The author recommends that librarians should continue upgrading their skills so that they are conversant with how the various open source software can be used in their institutions.

### INTRODUCTION

Libraries have a mandate of providing access to information to its clientele in an efficient and effective manner. In order to accomplish that, library automation helps in organising and managing information resources to provide wider access to these resources. Library automation can be accomplished using both open source and proprietary or commercial software according to Georgios and Fotis (2015), Kingdom and Ebikabowei (2014), Muhammad and Kanwal (2009) and Namjoo and Kwan (2015). Proprietary or commercial software is developed and owned by individuals and the source code is kept a secret,

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(LINFO, 2005). It requires a lot of funds to purchase and maintain it according to the end user license agreement. The open source software movement guarantees freedom to use open source software and the freedom includes freedom to run the software, to change the software, and to redistribute copies with or without changes. Users of the software can view and modify the source code leading to the development of powerful packages that are used in libraries today. A survey was conducted with 31 librarians who had attended international training programmes to see whether they have implemented the use of open source software in their libraries. The objective of the paper is to examine the adoption and use of open source software in libraries in developing countries.

## STATEMENT OF THE PROBLEM

Institutions are being faced with budgetary constraints due to the lack of funds and economic hardships that are being experienced in many developing countries. As a result, libraries are the last departments to be considered in allocating funds as institutions are talking about cost cutting measures and budget cuts from the ministries. Faced with such situations of unavailability of funds, libraries have to provide the services to the clientele so that they are able to answer their various information needs using the emerging technologies. The research question is how are libraries in developing countries providing the needed services in the face of financial challenges and budget cuts.

#### **OBJECTIVES**

The study seeks:

- 1. To examine the use of open source software in libraries in developing countries;
- 2. To explain the benefits of adopting open source software in libraries in developing countries;
- 3. To understand the challenges faced by libraries in developing countries when using open source software.

#### BENEFITS OF OPEN SOURCE SOFTWARE

Engard (2014), Creative Librarian (2016), Techsoup (2015), LINFO (2005), Jones and Ng (2011) agree that library collections are growing, and the task of organising library materials can be daunting if it is done manually. Due to the advent of information technology, various library management systems are now used to organise library materials (Reddy, 2013). There are a number of benefits that can be enjoyed by a library when it adopts open source software when automating its library services. Anilkumar, Mallikarjun, and Viral (2014), Bruno, Barbara, and Giancarlo (2012), Dalling and Rafferty (2013) state that the benefits include but are not limited to lower costs, no vendor lock in, adaption and innovation, and support through user communities and discussion groups (Reddy, 2013). Randhawa (2008) adds that librarians would have greater control of their environments if they adopt open source software since they can tailor make the software to meet their respective needs.

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