

# Awareness and Use of Open Source Software Among The Library Professionals in Bangalore City: A Study

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## Abstract

*This study investigates about the awareness and use of open source software among the library professionals in Bangalore city. Library professionals should be aware of the advantages of the open source software and have the basic knowledge of selection, installation and maintenance. Questionnaire method was used to elicit data from the respondents. Further suggestions and conclusion were drawn based on the findings of the study.*

**Keywords:** Bangalore, Free Software, LIS Professionals, Open Source Software, OSS

## 1. Introduction

Open source software is computer software whose source code is available under a license (or arrangement such as the public domain) that permits users to study, change, and improve the software, and to redistribute it in modified or unmodified form (Wikipedia). The history of OSS began with the establishment of The Free Software Foundation in 1985 founded by Richard Stallman to support the free software movement, which promotes the universal freedom to study, distribute, create, and modify computer software through its own General Public Licence.

Linus Torvalds began a project, wrote a program for operating system called Linux kernel in 1991 developed it through MINIX using the GNU compiler. In 1994 Red Hat (commercial Linux) company was founded providing open-source software products to the enterprise community. In 1998 an open source initiative was started by Eric S

Raymond and Bruce Perens to support open source software's.

## 2. Objectives of the Study

- ❖ To identify the awareness of open source software among library professionals.
- ❖ To identify different open source software available for library automation and management.
- ❖ To identify the use of open source software
- ❖ To identify the barriers in the use of open source software

## 3. List of Open sources Software's

Open source operating systems

- ❖ Ubuntu
- ❖ OpenSUSE
- ❖ CentOS
- ❖ Debian Linux
- ❖ BOSS
- ❖ Fedora
- ❖ Linux Mint



**Open sources Library Management Software's**

- ❖ Koha
- ❖ Newgenlib
- ❖ Openbiblio
- ❖ Evergreen
- ❖ Phpmylibr

**Open sources Digital Library Software's**

- ❖ Dspace
- ❖ Eprints
- ❖ Greenstone
- ❖ Digital Commons
- ❖ Dataverses
- ❖ dLibra

**Open Sources Content Management Software's**

- ❖ Joomla
- ❖ Wordpress
- ❖ Drupal
- ❖ Cushy CMS

**Features of Open sources software**

- ❖ Free Download
- ❖ Lower Costs
- ❖ Flexibility
- ❖ Reliability and Quality
- ❖ Reduces "Vendor Lock-in"
- ❖ Availability of External Support
- ❖ Simplified license management

**4. Review of Literature**

Riewe (2008) conducted a survey titled Survey of open sources Integrated Library systems (ILS) costs and benefits, and to inform librarians about considerations when choosing between an open and closed source ILS. The survey was conducted among libraries that used the largest open sources ILSs, Koha and Evergreen and various proprietary ILSs. The survey found that open source ILSs were more cost-effective than proprietary ILSs. Giri & Sengar (2011) in their paper have provided an insight into the practical implementation aspects of OSS for managing the activities and services of a library. They have identified that the main prerequisite of OSS use in libraries is the librarian's potentiality to harness the staff motivation in a positive way. They found that OSS is more future oriented and is a suitable low cost alternative to their proprietary counterpart. Muller (2011) stated that "integrated library systems (ILS) are multifunction, adaptable software applications that allow libraries to manage, catalog and circulate their materials to patrons". In choosing ILS software, libraries must base their decision not only on the performance and efficiency of the system, but also on its fundamental flexibility to readily adapt to the future demands and needs of their patrons.

**5. Methodology**

Survey method was used to elicit the data from the respondents. The researcher had visited and observed that different software's are used by the librarians for automation and management of different library activities. For the present study, a well-structured questionnaire was distributed among the respondents. 100 questionnaire was distributed and 70 filled in questionnaires were received back.

## 6. Data Analysis

The collected data has been interpreted analysed and presented it in tabular form manually. Based on the analysis results and conclusion were drawn.

**Table 1: Rate of Response**

Questionnaire Distrusted	Questionnaire Received	Response rate
100	70	70%

It is clear from table no 1 that 100 questionnaires were distributed to the library professionals and 70 filled in questionnaires were received back with the response rate of 70%.

**Table 2: Awareness of open sources Operating systems:**

Open source Operating systems	Aware	%	Not aware	%
Ubuntu	57	81%	13	19%
OpenSUSE	28	40%	42	60%
CentOS	22	31%	48	69%
Debian Linux	38	54%	32	46%
BOSS	16	23%	54	77%
Fedora	41	59%	29	41%
Linux Mint	44	63%	26	37%

It is evident from the above the table that the most of the respondents 57 (81%) are aware of Ubuntu open source software followed by Linux Mint 44(63%). Other software are less popular with 54 (77%) respondents saying they are not aware of BOSS followed by CentOS 48 (69%).

**Table 3: Awareness of Open Source Library Management Software**

Open source Library Management	Aware	%	Not aware	%
Koha	62	89%	8	11%
Newgenlib	56	80%	14	20%
Openbiblio	31	44%	39	56%
Evergreen	33	47%	37	53%
PhpmLibrary	28	40%	42	60%

Table no 3 shows the awareness of open source library management software's, majority of the respondents 62 (89%) are of aware of Koha followed by Newgenlib 56 (80%), and 39 (56%) are not aware of Openbiblio.

**Table 4: Aware of Open Source Digital Library Software**

Open source Digital Library	Aware	%	Don't Aware	%
Dspace	64	91%	6	9%
Eprint	58	83%	12	17%
Greenstone	54	77%	16	23%
Digital Commons	21	30%	49	70%
Dtaversess	16	23%	54	77%
dLibra	24	34%	46	65%

From the above table, no 4, Majority of the respondents are aware of digital library software available among them are Dspace 64(91%), Eprints 58 (83%) followed by Greenstone 54 (77%).

**Table 5: Awareness of Open Sources Content Management Software**

Open source Content Management Software	Aware	%	Don't Aware	%
Joomla	49	70%	21	30%
Wordpress	37	53%	33	47%
Drupal	46	66%	24	34%
Cushy CMS	14	20%	56	80%

Respondents are aware of Open Source Content Management Software among them the most popular are Joomla 49 (70%) followed by Drupal 46 (66%).

**Table 6: Purpose of using Open source software**

Purpose	Yes	%	No	%
Easy Download	54	77%	16	23%
Reliability and Quality	47	67%	23	33%
Software should be user friendly for customization	58	83%	12	17%
Low cost of purchase	66	94%	4	6%
Low cost of maintenance	62	89%	8	11%

It is observed from above table no 6 that the respondents use the OSS for the various purposes, majority of them 66 (94%) is of the opinion that OSS are accessible free of cost, since the library budget is a hindrance for the library professionals to manage the library activities is a challenge, OSS comes as a rescue to manage and automate the libraries.

**Table 7: Reason for Not- Using Open Sources Software**

Reason	No. of Respondents	%
Lack of Training programmes	38	54%
Lack of technical and skilled manpower	32	46%
Lack of management support	28	40%
Lack of Security	27	39%
Hidden costs	16	23%

The researcher tried to know the reasons for not using OSS by the respondents. 54% showed that lack of training programmes being the major constraint followed by 46% lack of technical and skilled manpower and 40% expressed poor support from management.

## 7. Conclusion

Open source software provide many advantages such as cost saving as well as flexibility to customize and upgrade according to the needs of the library. They are as efficient as proprietary software. Hence there is a need to promote awareness of open sources software among library professionals and they must also be provided adequate training to enable them to maintain and work on it efficiently.

## Reference

1. Bissels, G.(2008) Implementation of an open source library management system—experiences with Koha 3.0 at the Royal London Homoeopathic Hospital, open source software use in libraries 11. Program, 42(3), 303-14.

2. Breeding, M. (2007) An update on open source ILS. Computers in Libraries.USA: Vol. 27 No. 2, pp. 27-9.
3. Cervone, F. (2003) The open source option. Library Journal Net Connect, Summer, 8-12. 2.
4. Giri, R. & Sengar, D.S.(2011) Use of open source software in the learning resource centre of Indira Gandhi Institute of Technology: A case study. Annals Lib. Inf. Stud., 58, 41-48.
5. Muller, T. (2011). How to Choose a Free and Open Source Integrated Library System International digital library perspectives. 27(1): 57-78. [www.emeraldinsight.com/1065-075X.htm](http://www.emeraldinsight.com/1065-075X.htm).
6. Poulter, Alan.(2010) Open source in libraries: An introduction and overview.59(9),p.655-61
7. Riewe,L.M (2008) Survey of open source Integrated library systems. <http://www.libraryjournal.com/article/CA304084.html>.
8. Satpathy, Sunil Kumar and K. MAHARANA Rabindra. (2012) Awareness and Adoption of Open Source Software among LIS professionals of Engineering Colleges of Odisha. DESIDOC journal of Lib. & Information Tech..32(5)September, pp 421-426.

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