OPEN SOURCE SOFTWARE AWARENESS AND USE BY THE LIBRARY PROFESSIONALS OF PROFESSIONAL COLLEGES IN PUDUCHERRY

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Abstract

The 21st century is also called as knowledge era and the knowledge managers, librarians are the heart of this so called knowledge society. While, there are several resources and tools available before us on the internet, choosing the right tool and the authentic resource becomes a herculean task. Are these knowledge managers aware of the tools which they use in their routine? This study was conducted to analyse the awareness level of the librarians on the Open Source Software and its usage by them.

Keywords: Open Source Software, OSS, DSpace, KOHA, Greenstone, Awareness

1. Introduction

Computers are the most used inventions of the 20th century. Internet is another invention of the century which blended well over the years with the computers. These two components together have paved way for the invention of many more and have revolutionized the way we live. We broadly use the word Information Communication Technology to denote use of the gadgets like computers for communicating the thought contents to others and Internet has eased the way of transfer of information from one to another by making the earth a global village.

While systems and internet does a lot, in transferring information across through lot of channels and tools, data or information management has become a troublesome issue because of the information explosion. A variety of information management tools are available in the market and their price ranges from few thousand to lakhs. Thanks to the Open Source Initiatives, now tools are available free of cost using which the information in electronic, digital forms can be easily tagged, classified and managed. While free softwares can only be freely used, the Open Source Softwares are provided for free for use, modification and distribution by all.

The information managers are always in need of better tools to access, arrange and provide better services through the software that are cheaper or free. Hence, an attempt is made through a survey to find out the awareness and usage of Open Source software amongst the Librarians of professional colleges of Puducherry (a Union Territory of India, and an enclave of former French India).

2. Related Studies

Open Source Software (OSS) tools and their implementations in the libraries increases the access to variety of information sources and thereby aids at providing a dynamic and cost effective service for its clients at a larger extent within a shorter time (Payne & Singh, 2010). Though Open source softwares are widely being adopted across the globe, especially in western countries, in developing countries misconceptions about OSS plays a negative role in its adoption (Rafiq & Ameen, 2009). Even in developed countries the people heading the IT division or Information Division of top level organisations, reject OSS usage for various reasons. While some thought OSS as not relevant for their business, some belived OSS to be unreliable as it lacks ongoing support, few even cited lack of time as a reason for not adopting OSS (Goode, 2005)   On positive note still belief is there that organizations may discover their capabilities can be increased and their goals and objectives can be met using OSS with the minimal organizational budgetary and IT staffing (Hedgebeth, 2007).

3. Objectives of the study

1.   To evaluate the librarian's general perception of OSS.
2.   To examine the librarian's perception of Open source LMS software available.
3.   To identify the problems faced by Librarians in using LMS.
4.   To identify the most popular open source LMS software among the librarians in Pondicherry region.
5.   To determine whether Librarians have acquired Technical knowledge/skills through attending any workshop/training etc.
6.   To identify the Librarians awareness on OS digital library software.

4. Methodology and Sample

To carry out the study with the framed objectives, a questionnaire was carefully designed with both open and closed end questions and the same was distributed among the qualified library professionals of professional colleges in Pondicherry.The method of data collection is census method.

At the time of data collection the number of Medical and Nursing colleges were 4 each, Dental, Law and Veterinary colleges were 1 each. The highest number of colleges was Engineering Colleges, which are 9 in number. Totally 20 professional colleges are taken for the study.

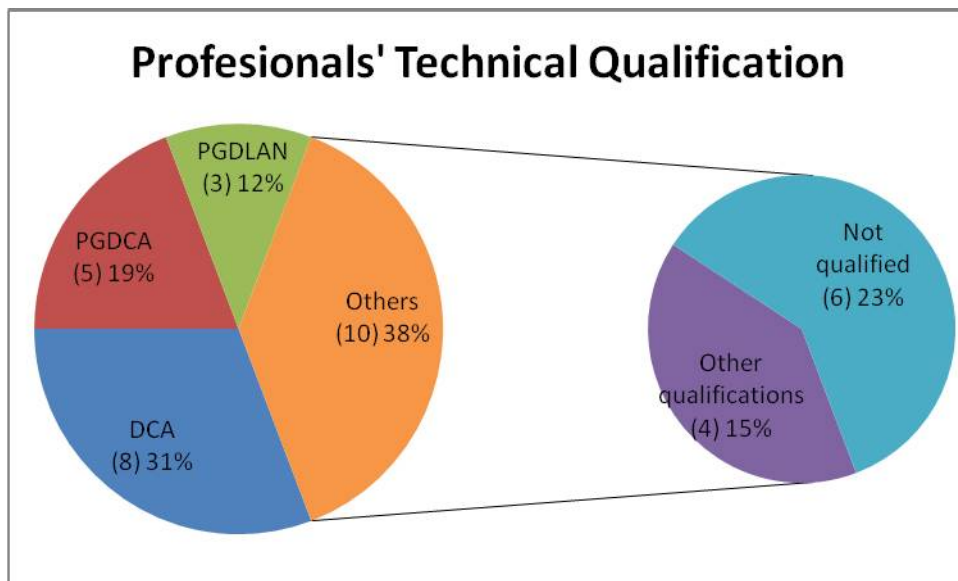| S .No	Institution	No. of Institutions	No. of Professionals	No. of Response
1	Medical College	4	9	8
2	Nursing College	4	4	4
3	Dental College	1	2	2
4	Veterinary College	1	1	1
5	Engineering College	9	12	11
6	Law College	1	1	0
	Total	20	29	26

There were 29 professionally qualified library professionals in these 20 institution and only 26 (89.65%) responded back with filled in questionnaires.

5. Analysis & Interpretation

5.1 Profile of Respondents

Out of 26 respondents, female library professionals were 4 (15.4%) in number and male professionals were 22 (84.6%). Majority of the respondents, 25 (96.15%) were having MLIS degree and only 1 (3.85%) was having BLIS degree only. Among the 26 professionals 18 are Librarians, 3 Deputy Librarians and the remaining 5 are Assistant Librarians.

5.2 Technical qualified professionals

An effort was made to analyze the number of technically qualified professionals amongst the sample through multiple choice questions. The response reveals that 8 of the respondents have done a Diploma in Computer Application, 5 have completed Post Graduate Diploma in Computer Application, and 3 have done Post Graduate Diploma in Library Automation and Networking. While 4 have done certificate course in Computer Applications 6 of them has not acquired any special technical qualifications.

5.3 ICT literacy

The professionals were asked to rate their ICT literacy level like Fair, Good, Very Good and Excellent.

Sl. No	Levels of Literacy	No. of Respondents	%
1	Fair	1	3.85
2	Good	20	76.92
3	Very good	3	11.53
4	Excellent	2	7.70
	Total	26	100.00

A majority of 20 (76.9%) professionals stated to have good level of computer literacy despite the fact that only 16 (61.5%) of them have acquired technical qualifications.

5.4 Open source general applications usage

Among the 26 respondents 21 (81%) of the professionals have used Mozilla Firefox, 12 (46%) have tried Open Office suite, 7 (27%) have tried both Firefox and Open office. None of them have tried Open Source Operating System like Ubuntu.

Majority of the respondents are using the systems which has Windows as its OS. As the applications Firefox and Open office are available for Windows platform, they have either tested them or had a chance to use it once.

5.5 Open source awareness level amongst Librarians

23% are aware that Firefox is open source software, the remaining thought that it comes under free software category and 19.3% are not aware about the Firefox. 38.5% are aware that open office is open source software. 7.8% only aware about the Ubuntu operating system.

Sl. No	License Type	Firefox		Open office		Ubuntu	
		Nos.	%	Nos.	%	Nos.	%
1	Open source	6	23	10	38.5	2	7.8
2	Free	14	53.8	7	26.9	0	0
3	Proprietary	1	3.9	0	0	0	0
4	Not answered	5	19.3	9	34.6	24	92.2
	Total	26	100	26	100	26	100

5.6 Respondents understanding of Open Source

The respondents were asked to choose the answer for the statement "Open source software means" from the 5 options that were listed below it. The responses are as follows:

Sl. No	Options	Answered	%
1	Freely available for use	17	65.4
2	Free to share	2	7.69
3	Source code is free	7	26.9
4	Demo purpose only	0	0
5	Available only through internet	0	0
	Total answered	26	100

While majority of 17 (65.4%) respondents felt that Open source means "the software is freely available for use" only 7 (26.9%) selected the option "source code is free".

5.7 Respondent's awareness on Open Source LMS.

The respondents were asked to categorize the 19 LMS software with its license type as Open source, Free and Proprietary. The following table shows the clear distribution of percentage of librarians answered. It is arranged in hierarchical order of well aware software. Dspace leading first with 78.95% correctly answered, Koha with 78.26%, Evergreen 70%, Libsys 68.42, WinISIS 63.64%, Greenstone 61.11% and NewGenLib 53.85%.

Software	Answered	%	Correctly Answered	%	Wrongly Answered	%	Not Answered	%
Dspace	19	73.1	15	79.0	4	15.4	7	26.9
Koha	23	88.5	18	78.3	5	19.2	3	11.5
Evergreen	10	38.5	7	70.0	3	11.5	16	61.5
Libsys	19	73.1	13	68.4	6	23.1	7	26.9
WinISIS	11	42.3	7	63.6	4	15.4	15	57.7
Greenstone	18	69.2	11	61.1	7	26.9	8	30.8
NewGenLib	13	50.0	7	53.9	6	23.1	13	50.0
Avanti	4	15.4	2	50.0	2	7.7	22	84.6
Firefly	4	15.4	2	50.0	2	7.7	22	84.6
OpenBiblio	4	15.4	2	50.0	2	7.7	22	84.6
SOUL	19	73.1	8	42.1	11	42.3	7	26.9
Emilda	5	19.2	2	40.0	3	11.5	21	80.8
OPALS	3	11.5	1	33.3	2	7.7	23	88.5
PhpMyLibrary	3	11.5	1	33.3	2	7.7	23	88.5
PMB	3	11.5	1	33.3	2	7.7	23	88.5
PYTHEAS	3	11.5	1	33.3	2	7.7	23	88.5
WEBLIS	3	11.5	1	33.3	2	7.7	23	88.5
ABCD	4	15.4	1	25.0	3	11.5	22	84.6
GNUTeca	4	15.4	1	25.0	3	11.5	22	84.6

It is evident from the above table that Koha is the most popular LMS software amongst the Pondicherry professional college librarians followed by Dspace software which is used for Institutional Repositories.

5.8 Open Source experience

To analyze the experience of Librarians with any of the LMS software, they are given a closed end question and 22 (84.6%) said that they have already used LMS software and 4 (15.4%) stated that they have never used LMS.

S.No	Place of Experience	No. of Respondents	Percentage
1	During study at LIS School	3	11.5
2	Internship	1	3.8
3	Training programs	11	42.3
4	Others	7	26.9
5	No Experience	4	15.4
	Total	26	100.0

Out of the 22 respondents nearly 11 (42.3%) have got to know the LMS only through training programs. 3 (11.5%) have got to know the LMS through the LIS schools.While 1 (3.8%) underwent training in LMS during Internship program, which is part of a regular program curriculum, 7 (26.9%) underwent training through other methods (i.e. through friends / colleagues)

5.9 Workshops/Trainings undergone by Librarians

Workshops and Training programs on Open Source LMS software have made the Librarians somewhat aware of them. Out of 26 library professionals 20 have attended workshops/training offered by vendors/service providers and experts in the past. Among those 17 have attended workshops offered by subject experts, 1 attended programs organized by vendors/service providers and only 2 attended workshops offered by vendor/service provider and Experts.

5.10 Suggestion by the librarians for increasing awareness on Open Source

The librarians are asked to suggest whether they need more workshops/trainings. The duration of the workshop/training were given 3 Days, 5 Days, 2 weeks and others. 100% of the librarians responded unanimously that they need more workshops/trainings. 10 (38.5%) respondents preferred 5 days' workshop, 7 (26.9%) preferred 3 days 'workshop while 6 (23.1%) preferred 2 weeks training and 3 (11.5%) stated 1-2 days workshops.

6. FINDINGS

  I.   Almost 76.9% of professionals have good level of computer literacy and 61.5% possess an additional diploma qualification related to ICT.
  II.   81% of professionals are using open source browser (Firefox) and 46% are using open source office package (Open Office Suite) but not even a single person is using Open Source Operating System.
  III. Even though Firefox is utilized by 81% of professionals only 23% are aware that it is open source software. Similarly, Open Office is also being

    used by 46% professionals and among those only 38.5% is well aware that it is an open source application.

IV.   The proper meaning of open source software is known to only 26.9% of the library professionals and majority of professionals (64.5%) thought that it as a "freely available for use" software only and 7.69% felt it only as "free to share software".

V.   As per the result obtained from the analyzed data, only few of the software related to LMS and Digital library software are popular among the librarians. The respondents' awareness is as follows: Koha (88.46%), Dspace (73%), Libsys (73%), SOUL (73%) and Greenstone (69.23%).

VI.   The analysis of data shows, 73% of the professionals were well aware about Libsys and SOUL but only 42% of the professionals are aware that SOUL is proprietary software.

VII.   As per the correct response of the respondents on software license categorization, the order of software is listed as follows: Dspace (78.95%), Koha (78.26%), Libsys (68.42%), Greenstone (61.11%) and SOUL (42.11%).

8. CONCLUSION

The combination of open source and proprietary development and licensing models yields dynamic and innovative software, while providing users with many choices to meet their needs. No one licensing or development model is appropriate for all customers or users in all situations. International chamber of commerce believes the best mechanisms for governments to support innovation and the software industry are policies where no cover preferences are provided based solely on the licensing or development model and supports continued and enhanced funding for basic software research coupled with effective and transparent intellectual property protection.

Open source software is more reliable for the professionals in the field of Library and information science. It allows modifying the content as depend upon the usage and organization. But it is done by only software expert group.

Among the Library software, respondents are more aware of only five of the software, namely Dspace, Koha, Libsys, Greenstone, and SOUL. Out of these five Dspace and Greenstone are Digital Library software and the other three are LMS. Koha is the most popular software amongst the working librarians followed by Libsys and SOUL.

Most of the professionals have done their master degree through distance education mode. This is the most important thing on literacy of open source LMS software among the librarians. They don't have a chance to get experience through distance education mode. As they are not much exposed to ICT hands on training, though

they have attended some workshops, they are confident neither about the concepts nor in practicing or implementing the same. More continuing education programs for working librarians will enhance their ICT skills and in turn give them the confidence to offer better services through the usage of those tools.

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