Winter 11-1-2018

Evaluation in use of KOHA Library Management Software in OPJGU, Sonipat

KAUSHAL CHAUHAN
chauhan_khushi@rediffmail.com

Evaluation in use of KOHA Library Management Software in OPJGU, Sonipat

Dr. Kaushal Chauhan
Deputy Manager- Global Library
O.P. Jindal University, Sonipat, Haryana

Abstract:

Purpose: This paper is the evaluation of use of KOHA library management software in OPJGU Library.

Methodology: This study is survey based. Data was collected with the help of questionnaire along with conversation and personal observation with OPJGU library colleagues. Total 15 OPJGU library professionals spread across JGU university libraries had participated in this study. Collected data was analyzed and interpreted through tables and charts.

Findings: It is found that from the study that OPJGU Library professionals have good perception towards KOHA and they also agreed with KOHA as free software with original source code. It is also found that OPJGU library has been equipped with good resources required to running library activities and services through KOHA Library Software. It is suggested that Staff and user should be given proper orientation on benefits and outputs of KOHA.

Implication: Koha must be fully utilized in maximum use services. Use of Koha should not be restricted to any category of staff. All staff should be involved service provision chain and they should be exposed to training and retraining in manipulating the KOHA automation software operations. Library users also should be trained and retrained in respect of utilizing Koha facilities and OPAC to access information. Workshops and seminars attendance be made mandatory for the library professionals to improve ease of use and user friendliness of KOHA software.

Originality/Value: This study clarifies that library authority should intensively use KOHA software. There should be efforts to trained and educates the whole staff for perfectly use of KOHA by library Professionals.

Keywords: KOHA, Library software, Library integrated Management System, Academic library management software, Open Source JGU Library system

Paper Type: Research Paper

Introduction: Library software is an important tool in today's changing environment of libraries. Now a day many libraries are using KOHA library management software to manage library by a computerized system. KOHA is the most advanced open source Integrated library system in use today by hundreds of libraries worldwide (Kumar, 2013). KOHA is very useful library management system in providing various library services to users including circulation of library material, cataloguing, new arrival etc. The name KOHA comes from a Maori Term for a "Gift" or "Donation". The development of KOHA began in 1999, funded by group of libraries in rural New

Zealand. That found proprietary software expansive and lacking some needed features. The full features KOHA was developed initially in New Zealand by Katipo Communications limited and first developed in January 2000 for Horowwhenua Library trust. KOHA is designed to work with a minimum of hardware resources. It runs on the Linux Operating system in conjunction with the apache Web Server, uses the popular MySql open source database management system and is written in Pearl. (Tella, Adeyinka & Others). KOHA is an open source ILMS which can keep track of library operations such as items, billing, tracking various items owned by library such as books, journals, newspapers etc. (Vera, 2015). KOHA is an open software Library Integrated Management System (LIMS) and is used worldwide by public, school, and academic libraries, which its developments was steered by a growing community of libraries and users collaborating to achieve their technological goal (Sobalaje Adewale Joel & others).

About OPJGU Library: Vision of O.P. Jindal Global University is to impart global legal and business education. The perspective of JGU is to equip their students and faculty with the knowledge, skills, scholarship and to meet the challenges and demands of globalization. The University's Global Library is being modeled after leading libraries at reputed universities in the world such as Harvard, Yale, Oxford and Cambridge. The mission of the Library is to provide adequate support for teaching and research and outreach programs of the University by providing access to up-to-date global sources of information and learning resources through state-of-art technology and services. The library aspires to meet the challenges of providing global up-to-date information to local users and local information to global users. The Global Library of JGU is housed in a centrally located and beautifully designed building having approximately 10000 sqft space. Spacious reading halls, most modern IT infrastructure provide the right ambiance for reading and research in the Library. The library is developing a comprehensive collection of print, digital and media resources on law, business, international relations, public policy and liberal arts & humanities to fulfill the teaching and research needs of the five schools of the university. The Library has a collection of more than 45,000 print volumes which include books, monographs, research reports, law reports, current issues and back volumes of periodicals and a comprehensive collection of encyclopedias, dictionaries, directories, handbooks, legislations; subordinate legislation, case law digests, multi-volume treatises on specialized subjects. In addition to the professional readings, the library provides a good amount of leisure reading and books for soft skills development. The global Library is a member of Developing Library Network (DELNET) which offers access to about 2000 libraries in India and neighboring countries. The teaching and research work of the University is also supported by online resources provide access to over 12000+ electronic journals (Ace Analyser, airwebworld Online, Cambridge Journals, EBSCO's Business Source premier, Encyclopedia Britannica, Heinonline, JSTOR, J-Gate, LexisNexis Academic, Manupatra,, Oxford Journals, Sage Journals, SCC Online), reports and a variety of ebooks (E-books collection on Bloomsbury**,** E-books collection in EBSCOHost, Dspace etc.) & other resources. Apart from it JGU library also provides JGU Teaching and research aids tools that includes Bluebook Online**,** Dspace**,** Survey Monkey.com**,** Turnitin**,** HBS Cases etc. A fully wi-fi campus enables access to e-resources subscribed by the library throughout the campus. Library service and collection management practices meet international standards. JGU library operates in fully computerized environment using KOHA (Version: 16.06.00.023); (Operating System Version: Linux library2.bestbookbuddies.com 3.14.32-xxxx-grs-ipv6-64 #9 SMP Thu Oct 20 14:53:52 CEST 2016 x86_64); (Pearl Language Version: 5.020002); (MySQL Version: mysql Ver

14.14 Distrib 5.5.55, for debian-linux-gnu (x86_64) using readline 6.3); (Server version: Apache/2.4.10 (Debian)); (Zebra Version: Zebra 2.0.59 (C) 1994-2014, Index Data Zebra is free software, covered by the GNU General Public License, and you are welcome to change it and/or distribute copies of it under certain conditions. SHA1 ID: c00bfddbf0f3608340d61298acc61dafb167f9b2 Using ICU) library management software for smooth functioning library. The library catalogue is available online. The RFID-based technology enables users to checkout their own books. In addition to lending services, the library provides reference and reprographic services.

Objectives:

1. To examine the use of KOHA Library Management System in OPJGU library.
2. To know factors affecting use of KOHA Library Management Software.
3. To determine the perception of OPJGU library professionals about KOHA library software.
4. To find out the satisfaction level among OPJGU library professionals towards KOHA library software
5. To know special features and user friendliness of KOHA Library Management Software.
6. To identify challenges and constraints faced by OPJGU library professionals in installing, using, maintaining KOHA software.
7. To examine the efficiency of KOHA with respect to OPJGU library professionals and Users.

Literature Review:

Koha is a web-based ILS, with a SQL database (MySQL preferred) backend with cataloguing data stored in MARC and accessible via Z39.50 or SRU. The user interface is very configurable and adaptable and has been translated into many languages.[3] Koha has most of the features that would be expected in an ILS, including: Various Web 2.0 facilities like tagging, comment, Social sharing and RSS feeds, Union catalog facility, Customizable search, On- line Circulation, Bar code printing. Koha was created in 1999 by Katipo Communications for the Horowhenua Library Trust in New Zealand, and the first installation went live in January 2000 (Wikipedia, 2018).

Koha library software is an open source software (OSS) is computer software whose source code is available under a license for users to look at and modify freely and permits users study, change, and software and to redistribute it in modified or unmodified form (Tella, Adeyinka & others). Koha is a full featured, Open source ILS. It is easy to use KOHA with its many advanced features which attracted to open source technology and its free availability (Corrado, 2005).

Open source is known as open source software (OSS) or free OSS or free/library OSS. The source in open source refers to source code. Source code is a computer file containing statements in a programming language and those statements are intended to define the performance of a task: so, all software is produced from source code. The difference of Open source is that original source code file are made publicly available typically via the internet or on some digital storage medium. The other type of source code file that are not publicly published are known as proprietary (i.e. closed source) and are kept private (Poulter, 2010).

Since the original implementation, KOHA has been adopted by thousands of libraries worldwide, each adding features and functions, deepening the capability of the software. With the release of KOHA 3.0 version in 2005 and the integration of the powerful Zebra indexing engine. The software became a viable, Scalable solution for libraries of all kinds (http://www.koha.org). There are about 47 Languages of the world that the software is accessible to (Uzomba & others 2015)

Primary aim of Koha is to provide an integrated library management tool, covering all major functions in a library, such as Acquisitions, bibliographic database management, user management, transactions, serial control, online end user searching on local and exernal bibliographic databases and library portal.

Methodology: This study is survey based. A *Survey* is a research method used for collecting data from a pre-defined group of respondents to gain information. It consists pre-determined set of questions that is given to sample. Sample is a small portion of the population that is selected for observation and analysis. Data was collected with the help of questionnaire. The questionnaire titled "Evaluation in use of KOHA Library Management software in OPJGU" was designed by author to gather Information. Questionnaire has been known to one of the most common research instruments specially when conduction a survey study. It is used to elicit useful information in the area of attitude and opinion (Tella, Adeyinka & others, 2017). Hence questionnaire along with conversation and personal observation were used to get information OPJGU library colleagues. Total 15 OPJGU library professionals spread across JGU university libraries had participated in this study. Collected data was analyzed and interpreted through tables and charts.

Data Interpretation:

Table 1: Age of Respondent:

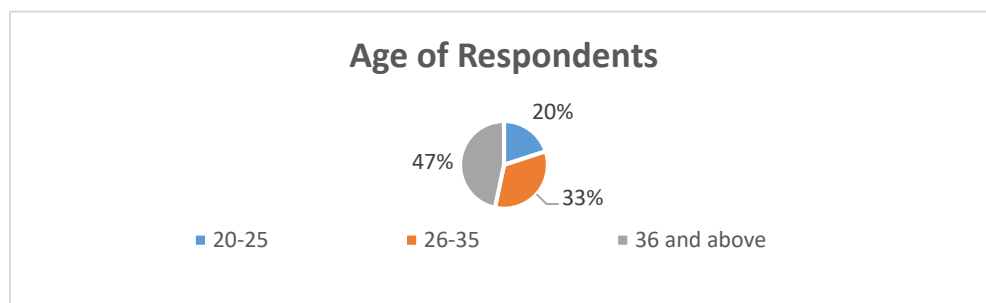| Age	Frequency	Percentage
20-25	3	20%
26-35	5	33%
36 and above	7	47%
Total	**15**	**100%**

Fig. 1 Age of Respondent

The above table and charts descries that 20% respondents were of age 20-25, 33% Respondents were of age 26-35 and 47% respondents were of the age of 36 and above who were participated in this study.

Table2: Gender

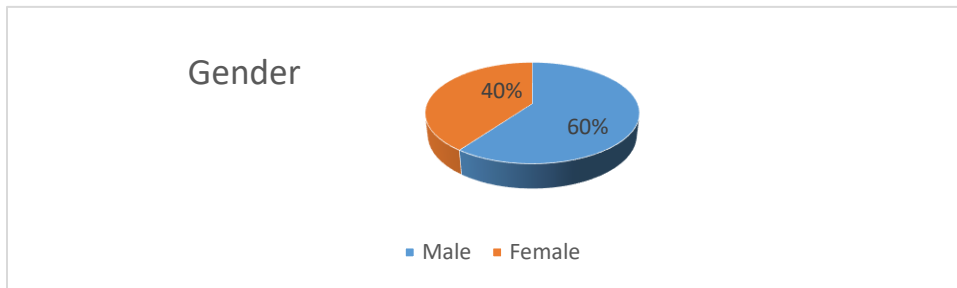| Gender	Frequency	Percentage
Male	9	60%
Female	6	40%
Total	15	100%

Fig.2 Gender

No. 2 of table and chart represent that 60% respondents were male who participated in this study and 40% were female respondents.

Table 3: Qualification

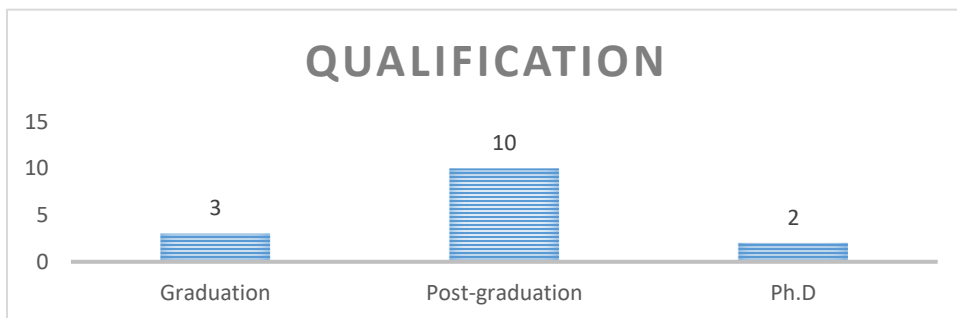| Qualification	Frequency
Graduation	3 (20%)
Post-graduation	10 (67%)
Ph.D	2 (13%)
Total	**15 (100%)**

Fig.3: Qualification

It is revealed in table and chart No. 3 that a good number of the library professionals are post graduate in OPJGU Library who have positively participate in this study.

Table 4. Position

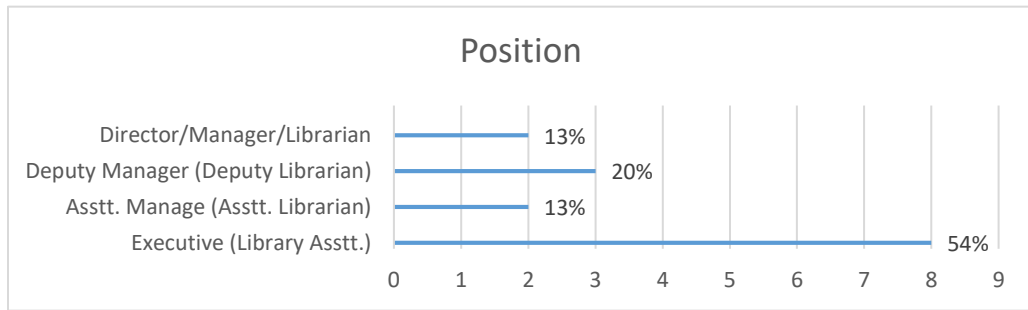| Position	Frequency	Percentage
Executive (Library Asstt.)	8	54%
Asstt. Manage (Asstt. Librarian)	2	13%
Deputy Manager (Deputy Librarian)	3	20%
Director/Manager/Librarian	2	13%
Total	**15**	**100%**

Fig. 4 Position

The above table and chart No. 4 revealed Positions of OPJGU Library Professionals. It is found that maximum positions are of Executives (Library Assistants) in OPJGU Library.

Table 5: Experience

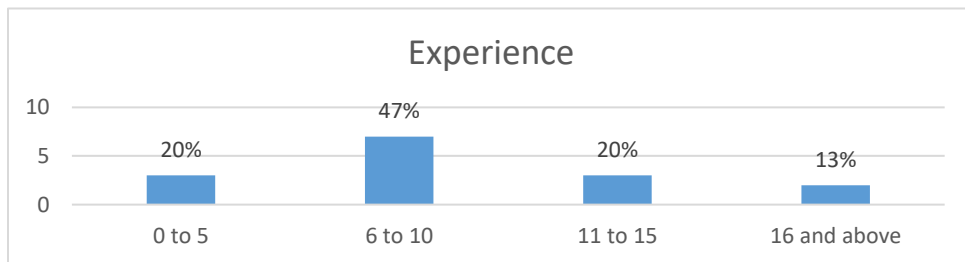| Experience	Frequency	Total
0-5	3	20%
6-10	7	47%
11-15	3	20%
16 and above	2	13%
Total	**15**	**100%**

Fig 5: Experience

It is found that majority (47%) JGU library professionals have 6 to 10 years working experience.

Table No. 6: Perceptions of Library Professionals about KOHA

Perceptions about KOHA	Frequency
Customizable and with easy to search option	7
Serial system is easy to use	3
Acquisition system is manageable	5
Union catalogue facility is available	9

Note: Respondents can choose more than one options
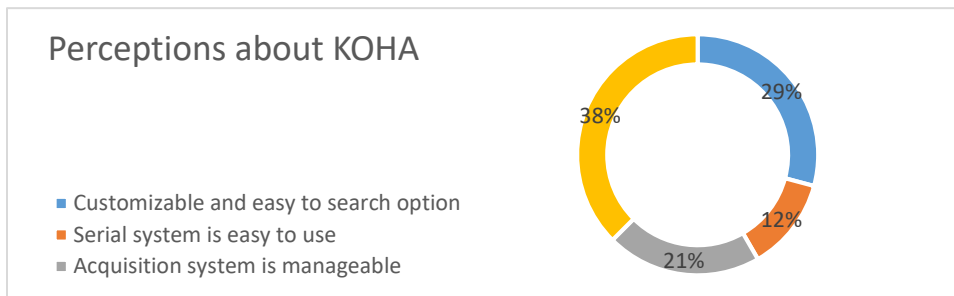

Fig. 6: Perceptions about KOHA

The table and chart No. 6 indicates the perception of library professionals about KOHA software. It is found that maximum respondents (38%) good perception with respect to availability of union catalogue in KOHA followed by customizable and easy to search option.

Table No.7: Availability of KOHA process Tools:

Availability of KOHA Process Tools	Frequency
Internet	10
Computer/ Laptop	8
Barcode Readers	5
Printers	3

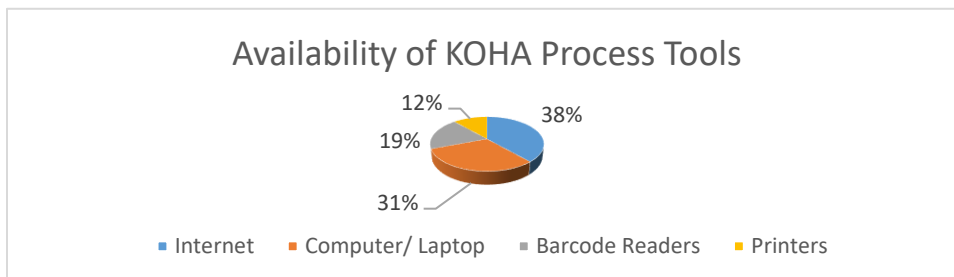**Note:** Respondents can choose more than one options

Fig. 7: Availability of KOHA Process Tools

It is clear through table and chart No. 7 that OPJGU library has been equipped with good resources required to running library activities and services through KOHA Library Software.

Table. No. 8: Use of Koha software in Library

Use of Koha software in Library	Frequency
To Register Users	10
For Cataloguing and Classification	5
To charge and discharge Library material	15
To access web based OPAC	12
To Generate Statistics Reports	6
For Library stock management	4

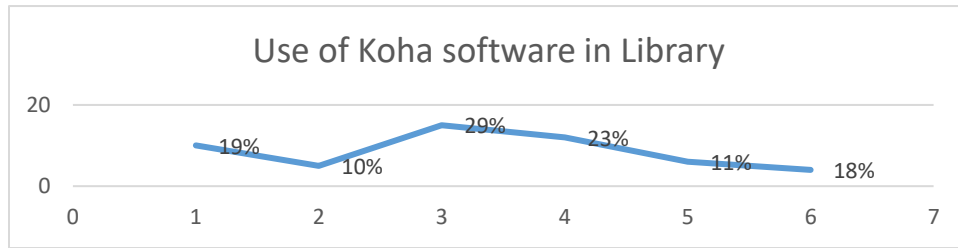**Note:** Respondents can choose more than one options

Fig. 8. Use of Koha software in Library

Above Table and chart No. 8 depicts that maximum 29% respondents said that KOHA is useful in to charge and discharge Library material followed by 23% to access web OPAC.

9.Library Professional satisfaction with KOHA:

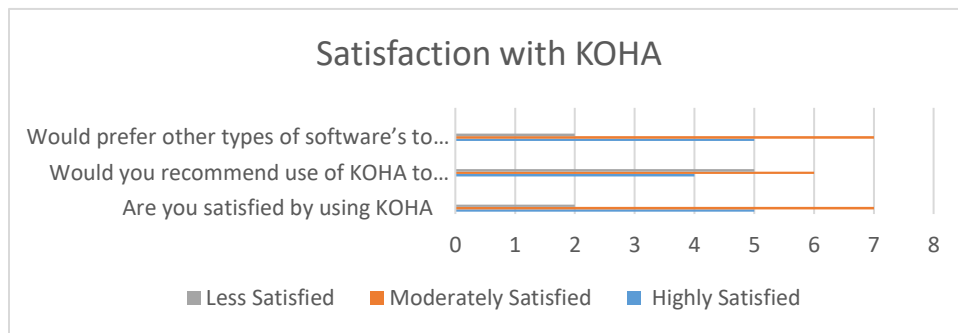| Satisfaction with KOHA	Highly Satisfied	Moderately Satisfied	Less Satisfied
Are you satisfied by using KOHA	5 (36%)	7 (35%)	2 (22%)
Would you recommend use of KOHA to other libraries	4 (28%)	6 (30%)	5 (56%)
Would prefer other types of software's to Koha	5 (36%)	7 (35%)	2 (22%)

Fig. 9: Satisfaction with KOHA

It is clear from the above Table and charts that OPJGU Library Professional are moderately satisfied with respect to KOHA using, recommendation to other libraries and with of other types of software to KOHA.

Table No. 10: Factors affecting Use of KOHA

Factors affecting Use of KOHA	Frequency
Product	6
Operating System	7
Product quality	8
Functionality	9
User Interface	11
Design	7

Note: Respondents can choose more than one options
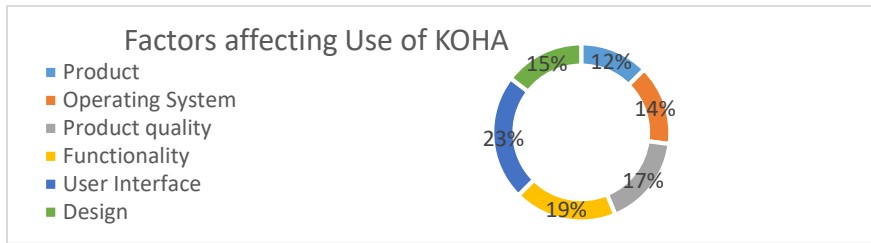

Fig. 10: Factors affecting use of KOHA

The Table and chart No. 10 indicates about factors affecting use of KOHA, majority 23% respondents said that user interface followed by functionality are the main factors who affects uses of KOHA.

Table 11. User friendliness and ease of Use of Koha

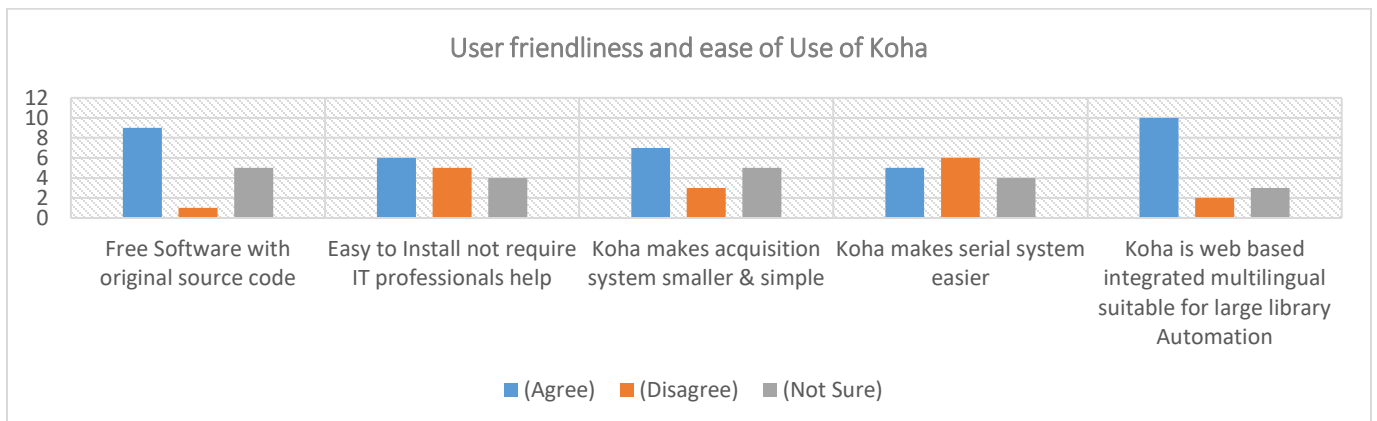| User friendliness and ease of Use of Koha	(Agree)	(Disagree)	(Not Sure)
Free Software with original source code	9 (24%)	1 (6%)	5 (24%)
Easy to Install not require IT professionals help	6 (16%)	5 (29%)	4 (19%)
Koha makes acquisition system smaller & simple	7 (19%)	3 (18%)	5 (24%)
Koha makes serial system easier	5 (14%)	6 (35%)	4 (19%)
Koha is web based integrated multilingual suitable for large library Automation	10 (27%)	2 (12%)	3 (14%)

Fig. 11: User friendliness and ease of Use of Koha

The above table and chart No.11 shows that maximum respondents are agree with KOHA as free software with original source code, Koha is web based integrated multilingual suitable for large library automation followed by Koha makes acquisition system simple and smaller.

Table No. 12: Challenges encounter by library professionals in use of KOHA

Challenges encounter by library professionals in use of KOHA	Frequency
Financial difficulty	4 (7%)
High cost of maintenance	5 (9%)
Poor management	5 (9%)
Software Problems (Hanging)	7 (12%)
Network Problems (Wi-Fi)	8 (14%)
Inadequate in house experts	9 (16%)
Lack of Training and retraining of staff	10 (18%)
Crashing Problem	3 (5%)
Lack of technical knowledge	6 (10%)

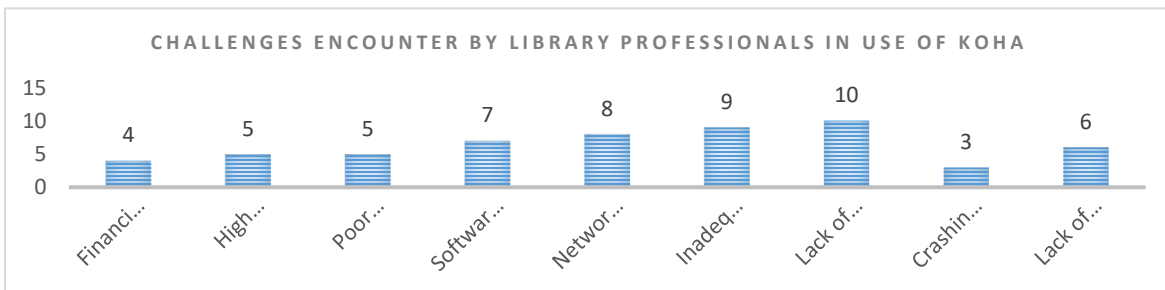**Note:** Respondents can choose more than one options

Fig No. 12: Challenges encounter by Library Professionals in Use of KOHA

It is found through above table and chart No 12 that majority of OPJGU Library staff feels lack of Training and retraining, Inadequate in house experts followed by Networks problems in operating KOHA library software.

Table No. 13: Suggestion for improving use of KOHA

Suggestion for improving use of KOHA	Frequency
Internet should be provided uninterruptedly	10
Enough funds should be provided for maintenance	8
Staff and user should be given proper orientation on benefits and outputs of KOHA	13
Software should be fortified with antivirus against virus attack	11

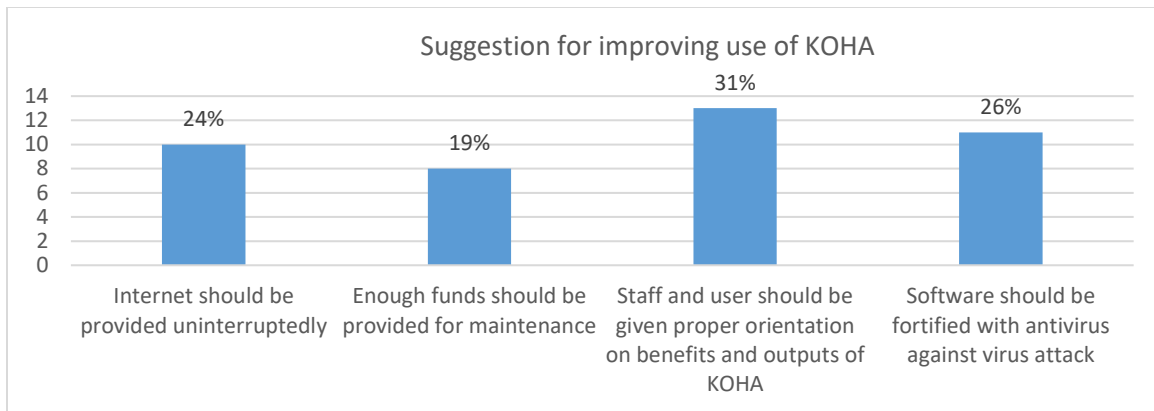**Note:** Respondents can choose more than one options

Fig. 13 Suggestion for improving use of KOHA

It is observed that maximum 31% JGU Library professionals suggested that Staff and user should be given proper orientation on benefits and outputs of KOHA followed by Software should be fortified with antivirus against virus attack.

Results/ Findings:

1. It is found that 20% respondents were of age 20-25, 33% Respondents were of age 26-35 and 47% respondents were of the age of 36 and above who were participated in this study.
2. Maximum 60% respondents were male who participated in this study and 40% were female respondents.
3. A good number of the library professionals are post graduate in OPJGU Library who have positively participate in this study.
4. It is found that maximum positions are of Executives (Library Assistants) in OPJGU Library.
5. Majority JGU library professionals have 6 to 10 years working experience.
6. It is found that maximum respondents (38%) good perception with respect to availability of union catalogue in KHOA followed by customizable and easy to search option.
7. It is clear through this study that OPJGU library has been equipped with good resources required to running library activities and services through KOHA Library Software.
8. Maximum 29% respondents said that KOHA is useful in to charge and discharge Library material followed by 23% to access web OPAC.
9. It is clear from the study that OPJGU Library Professional are moderately satisfied with respect to KOHA using, recommendation to other libraries and with of other types of software to KOHA.
10. Majority respondents said that user interface followed by functionality are the main factors who affects uses of KOHA.
11. Maximum respondents are agreed with KOHA as free software with original source code, Koha is web based integrated multilingual suitable for large library automation followed by Koha makes acquisition system simple and smaller.

12. It is found that majority of OPJGU Library staff feels lack of Training and retraining, Inadequate in house experts followed by Networks problems in operating KOHA library software.
13. It is observed that maximum JGU Library professionals suggested that Staff and user should be given proper orientation on benefits and outputs of KOHA followed by Software should be fortified with antivirus against virus attack.

Conclusion: It is a recognized fact that the coming age is going to rely heavily upon information servers. To play this role more efficiently in order to meet challenges of the 21st century, KOHA must be fully introduced in OPJGU library services without any delay. Use of Koha should not be restricted to any category of staff. All staff should be involved service provision chain and they should be exposed to training and retraining in manipulating the KOHA automation software operations. Library users also should be trained and retrained in respect of utilizing Koha facilities and OPAC to access information. Based on findings of this study it is recommended that library management should not compromise the perception and satisfaction of the library professionals with respect to KOHA software usage but should make appropriate efforts to educate the library professionals and users for effective use of this software. Workshops and seminars attendance be made mandatory for the library professionals to improve ease of use and user friendliness of KOHA software. As per OPJGU library professional's perception KOHA is efficient software for automating libraries; as library professionals know koha is free software and users can modify and customize it as per their requirements to smooth running of library. This study will be beneficial for libraries which are using KOHA for providing user services. It is expected that result of this paper will increase more libraries as KOHA users. This study will help library professionals in creating awareness while using and implementation KOHA Library management software.

References:

1. Alan Poulter, (2010) Open source in libraries: an introduction and overview. Library Review, Vol. 59 Issue: 9, pp.655 661, https://doi.org/10.1108/00242531011086971
2. Wikipedia. https://en.wikipedia.org/wiki/Koha_(software) (accessed on 30/08/2018)
3. Chauhan, Kaushal. (2014). A Case Study of Collection Development in MMEC Library. Pearl: A Journal of Library and Information Science. (ISSN: 0973-7081. Online ISSN: 0975-6922),V. 8 (3), July-September 2014, p. 125-129.
4. Corrado, E. M. (2005). The importance of open access, open source and open standards for libraries, issues in science and technology librarianship. http://www.istl.org/05-spring/article2.html#7 (accessed on 18/08/2018)
5. Sobalaje AJ, Ajala IO, Salami KO (2018). Assessment of Koha for Online Library Management in Nigerian Academic Library: A Case Study of Olusegun Oke Library, Lautech, Ogbomoso. Inter. J. Acad. Lib. Info. Sci. 6(2): 23-32. https://www.academicresearchjournals.org/IJALIS/Abstract/2018/April/Sobalaje%20et%20al.htm (accessed on 20/08/2018)
6. KOHA. http://www.koha.org/ (accessed on 04/09/2018)
7. Projektlink Konsult Limited (2010). Introducing KOHA, An Integrated Library Management System. Blue Print Concept, Ibadan, Nigeria. (accessed on 22/07/2018)

8. Chauhan (Kaushal). (2015). User Satisfaction with Adequacy of Library Collection in MM Engineering College Library. International Journal of Art and Humanity in Social Science. V. 2 (2), (Mar-Apr 2015), p. 08-11. 2

9. Boss, R.W. (2008). Open Source Integrated Library System Software. Public Library Association. Retrieved from http://www.ala.org/ala/mgrps/divs/pla/plapublications/ (accessed on 20/07/2018)

10. Bailey, Charles W., Jr. (2006). Open Access and Libraries. Retrieved January   15,   2008, from Website: http://www.digitalscholarship.com/cwb/OALibraries2.pdf

11. Tella, Adeyinka & Others. Assessment of the Use of Koha Library Software in four Selected University Libraries in Nigeria. https://www.google.com/search?ei=_Va3W4G6AcnSvgSJ-6HoDw&q=citations+about+koha+ADEYINKA+TELLA+ASSESSMENT+OF+THE+USE+OF+KOHA&oq=citations+about+koha+ADEYINKA+TELLA+ASSESSMENT+OF+THE+USE+OF+KOHA&gs_l=psy-ab.3...15711.20418.0.21410.14.14.0.0.0.0.304.3168.0j3j9j2.14.0....0...1c.1.64.psy-ab..0.1.301...35i304i39k1.0.-qF_RfcKf3A (accessed on 25/08/2018)

12. Uzomba, C.E., Oyebola, O.J and Izuchukwu, C.A. (2015). The Use and Application of Open Source Integrated Library System in Academic Libraries in Nigeria: Koha Example

13. Vera, A. N. and Edore, A. T. (2015). Assessment and Evaluation of KOHA ILS for Online Library Registration at University of Jos, Nigeria. Asian Journal of Computer and Information Systems 3 (1), p. 21-27. https://www.researchgate.net/publication/311614881_Assessment_and_Evaluation_of_KOHA_ILS_for_Online_Library_Registration_at_University_of_Jos_Nigeria (accessed on 22/07/2018)