

Assessment and Evaluation of KOHA ILS for Online Library Registration at University of Jos, Nigeria

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ABSTRACT---

Purpose: *Advancement in information and communications technology has obligated libraries to embrace automation of library processes. University libraries in Nigeria are in different stages of library automation using different Integrated Library Management System (ILS) which could be either Open ILS or Propriety ILS. Library registrations in most universities in Nigeria is still done manually irrespective of the category of ILS being deployed, thus, the generation of statistics of library usage has always been problematic. This paper evaluates the adoption of KOHA ILS for library online registration at the University of Jos Nigeria.*

Methodology: *The paper discussed University of Jos automation processes using KOHA ILS, efficient and effective migration strategies from Integrated Technical Services (ITS) for windows and Virtua ILS's to KOHA ILS. The study adopted survey design. Questionnaire were used as instrument for data gathering to elicit for ease of use of KOHA ILS for online library registration at the library. The experience of a total of 24 library staff who were involved in the 2014/ 2015 registration exercise was enumerated.*

Findings: *The paper shows that KOHA was selected at the library out of necessity and not fully planned for. It further enumerated the prospects and challenges faced by the staff involved in the registration processes. The survey also found that Open Source ILSs are more cost effective than proprietary ILSs. The research enumerated overall staff satisfaction for the use of KOHA ILS.*

Results: *The use of KOHA ILS will solve the problem of manual processing and untimely statistics generation. Online registration database gives access to easy and accessible information retrieval in an efficient and effective manner.*

Conclusion and recommendation: *The migration to KOHA Open access ILS from ITS and Virtua Proprietary ILSs at University of Jos is an astounding experience for the staff of the library and the University community at large. Open access ILS is more cost effective and aids ease of access to information. It was recommended that the software should be moved to the Wide Area Network (WAN) to ease congestion and encourage self-registration from library users.*

Keywords--- Koha ILS, library online registration, Automation processes, University of Jos, Integrated Technical Services(ITS) for Windows, Virtua ILS, University of Jos, Nigeria

1. INTRODUCTION

Neelakandan et al (2010) compared library to a fast growing organism to which ancient methods of maintaining her services are no longer dynamic and efficient. Advancement in information and communications technology has obligated libraries to embrace automation of library processes. Library automation is the process of adopting ICT to replace the manual systems (such as acquisition, serial control, cataloguing and circulation) in the library. Sudhamanik(2010) defined library automation as the use of computers, associated peripheral media such as magnetic disks, optical media, etc. and utilization of computer based products and services in the performance of all type of library functions and operations. Integrated Library System (ILS) is the main software in use in libraries, and this could either be Open ILS () or Proprietary ILS (). Every ILS have an Information retrieval system characterized by short bibliographic records (metadata) called OPAC (Online Public Access Catalogue). KOHA is an Open Source ILS which can keep track of

library operations such as items, billing, tracking various items owned by a library such as books, Journals, newspapers, etc. This paper evaluates the adoption of KOHA ILS for library online registration at the University of Jos Nigeria.

2. HISTORICAL BACKGROUND OF DIGITIZATION AT UNIVERSITY OF JOS LIBRARY

The University of Jos started off as a campus of the University of Ibadan in 1971. It became one of the Second generation universities in the country with promulgation of Decree 82 of 1979. At inception, only Arts courses were offered (Akintunde, 1999). Today, courses are offered in thirteen faculties: Arts, Agriculture, Education, Engineering, Environmental Sciences, Law, Management Sciences, Medical Sciences, Natural Sciences, Pharmaceutical Sciences, Social Sciences, Veterinary medicine and the Postgraduate School.

Automation process of library services at the University of Jos started in the 90s (Akintunde, 1999). Initiated in the mid 80s by late Mr. Bartholomew Nwafor(First University Librarian) and kick started by Mrs Audrey Bernice Ojoade (Second University Librarian) and Stephen Akintunde (Head of Systems Unit, 1995-2013). The library established a Computer Unit between 1992 to 1993 which was to serve as the factory for digitization work in the library (Akintunde, 1999).

The library administration under the leadership of Mr. Nwafor knowing that digitization would eventually lead to a new culture set up three committees (one: to develop a blue print for the library automation, two- to advice the Library Administration on the necessary steps to take in the ultimate automation of all or part of the processes and three: to oversee library computerization process and policies.)

These committees singled out cataloguing and circulation processes as potential starting point for automation. This led to the purchase of Integrated Technical Services (ITS) for Windows Cataloguing Module of Library Management System in 2001.

3. INTEGRATED TECHNICAL SERVICES (ITS) FOR WINDOWS

Integrated Technical Service (ITS) for Windows is a proprietary software from The Library of Congress (TLC). It was purchased and installed at the University of Jos Library in July 2001. The software was installed on standalone systems. Cataloguing staff work on different machines at every point in time.

In August 2004, the library sent three library staff (a programmer and two Cataloguers) and a staff of Computer center to University of Ghana, Legon to understudy their operations in the use of ITS for cataloguing. Sequel to the training, in November 2004, the ITS for Windows software was then installed to run on a server(running on a Local Area Network) thereby centralizing cataloguing processes which became much more easier to backup records from one unified database. These staff were involved in aggressive train the trainer programs for all library staff in order to improve library services. The University of Jos eventually became the training point for some other University libraries that were using or were going to use *ITS* for *Windows* and who also would be part of the Visionary Technology for Library Systems (VTLS) consortium.

4. VIRTUA ILS

VTLS consortium is a group of six academic libraries in Nigeria that signed a contract with Visionary Technology for Library Systems (VTLS) in July 2007 to use “VIRTUA “as their integrated system of choice. These libraries include:

- Ahmadu Bello University Zaria (ABU),
- Bayero University Kano (BUK),
- Obafemi Awolowo University (O.A.U.),
- University of Ibadan (U.I),
- University of Jos (UJ) and
- University of Port Harcourt (Uniport)

The migration to Virtua was made possible with the introduction of the Carnegie capacity building project of Carnegie Cooperation of New York and the intervention of an International partner (Mortenson Center for International Library program).The backup of less than 10,000 data from ITS for Windows was migrated to Virtua ILS which runs on the Wide Area Network (Internet). Virtua software is a full integrated Library System unlike ITS that only has the Cataloguing module.

5. KOHA ILS

After the dual fire incidence in the library and ICT Directorate of the university of Jos on 27th March, 2013 and August 2013 respectively, the servers (including the ITS and Virtua software installations) were damaged thus the need for Koha. Koha ILS was installed out of necessity at the University of Jos Library on the 28th of September 2013. A total of 49,919 records were migrated from ITS / Virtua backup to the Koha server. It is currently running on a Local Area Network (LAN). KOHA ILS is developed to boost all library routines activities as required by library patrons.

6. OBJECTIVES

This paper examines the use and application of online user accounts for Library registration at the University of Jos, Nigeria; the following objectives are considered in the study

1. To determine the reasons for migrating to Open ILS from Proprietary ILS at University of Jos Library
2. To determine the ease of use of KOHA ILS for online user accounts
3. To determine the satisfaction rate of use of KOHA ILS search engine for online services
4. To determine the completeness of functionalities in KOHA ILS

7. LITERATURE REVIEW

A review of relevant literature which supported the acceptability of use of KOHA was conducted. In her Master's thesis which focused on a survey of open source ILS's, Riewe, Linda M. (2008) found that open source ILSs were more cost-effective than proprietary ILSs. Libraries using open source ILSs chose them mainly for affordability. Although users of open source ILSs experienced difficulties with installation and incomplete documentation, they were modestly more satisfied than users of proprietary ILSs.

In his paper which focused on the development of an ILS using KOHA, Zico, M. (2009) stated that the web based nature of KOHA makes it flexible and portable. According to him KOHA was installed on a server and was accessed via Internet Protocol (IP) address or its Uniform Resource Locator (URL) thereby eliminating the need to install a third party software like Microsoft Visual Basic to have a complete Library management system. All that is needed is a web browser from which the ILS can be accessed by any computer that is connected to the Internet. Zico, M. (2009) also stated that he was able to customize the KOHA installation. Customization included user interface, policy making, system preferences, budget making, item type administration and vendor organization. He also observed that the open source nature of KOHA makes for easy access to support for developers, users and maintainers. In his overview of the security system of KOHA ILS, Zico, M. (2009), observed that the OPAC grants access to documents on the KOHA. There are also different levels of access from System Administrator to part time employee of the library. In their paper which discussed the automation of Adeyemi College of Education Library, R.A. Egunjobi, R.A. & Awoyemi, (2012) observed that automation can improve the library's relevance to the academic community. The paper further revealed that library staff enjoy working in an automated environment and the patrons enjoy services rendered using an OPAC instead of a card catalogue. They also stated that Library automation will address the problem of manual processing of materials. It will further mean less drudgery, easy generation of records, space conservation, improvement of information services, and easy retrievals. They also observed that using KOHA ILS which is an open source ILS will help to solve one of the major problems of library automation in Nigeria which is funding. In a survey of the factors affecting actual system use, Akinbobola & Adeleke (2013) submitted that usability, supportive management, and computer self-efficacy strongly influenced library personnel's actual use of the KOHA software system. They also further stated that Computer self-efficacy takes precedence over other variables in influencing actual system use. This they said it is consistent with social cognitive theory. The findings of Akinbobola & Adeleke (2013) suggest that the KOHA software meets library personnel's specifications and has the ability to fulfill their needs effectively and efficiently. They further stated that Library personnel have the capability and are confident in their ability to use computers and to perform well with the KOHA software. Akinbobola & Adeleke (2013) implicated a social persuasion from the management for them to make mandatory use of the KOHA software as a major source of this confidence. They therefore suggested that management should increase support of users in adapting to the KOHA software and offer training to build up their confidence for successful adjustment. Their findings also has implications for software developers to improve the usability of the KOHA software.

8. METHODOLOGY

The study adopted survey research design. A structured questionnaire was designed using google forms (https://docs.google.com/forms/d/1XRnpuM4viQ_NNLRO8299a4MVkDq9mRp4BruqYZbptj0/viewform) to elicit primary data. Google shortner was used to shorten the url to (<http://goo.gl/nD8lLo>) and the link was sent to the 25 staff (24 staff and a coordinator) that were involved in the online library registration. These staff were made to fill in the questionnaire with the help of a research assistant. The questionnaire was divided into two sections, section 1 elicited demographic information which include gender, age group, designation, etc. While the second section elicited for information on Ease of use, challenges and satisfaction rate for use of KOHA ILS search engine for online services.

9. FINDINGS

The analysis and discussion from the study provides an overview of the issues outlined in the objective above. The data as presented consists of the findings obtained from online survey filled by the 24 staff who were involved in the online Library Registration. The format of the research instrument which contained various sections was used as a guideline for analyzing the data. In explaining the data, a descriptive approach was employed by which themes and patterns that

emerged from the data were used to address the research questions¹. In analyzing the data, the “summary of responses” tool of the Google form was used for the quantitative. The data is presented using tables; in the presentation, percentages were rounded to one decimal place for easy comprehension.

Section one of the questionnaire consists of the demographic information of the respondents. **Table 1** shows that a higher percentage of males (71%) were involved in the online library registration than female (29%) while **table 2** shows that the team that was involved in the online registration had more of Library Assistants constituting of (46%), Others (25%) and Librarians (21%). Library Officer and Systems Analyst were both (4%).

Table1 - Gender

Gender	N=24	%
Male	17	71%
Female	7	29%
Total	24	100

Table 2- Designation

Designation	N=24	%
Librarian	5	21%
Library Officer	1	4%
Library Assistant	11	46%
Systems Analyst	1	4%
Others	6	25%
Total	24	100

Table 3 shows that a higher percentage of the staff (63%) were involved in “Registration” , Both Registration and Validation had 17% of the staff involved, Supervisory had 8% involved, while Validation, Technical know-how and signing and issuing of cards had 4% each involved.

Table3 - What aspect of the online registration were you involved in?

Duty	N=24	%
Registration	15	63%
Validation	1	4%
Both Registration and Validation	4	17%
Technical know how	1	4%
Signing and issuing of cards	1	4%
Supervisory	2	8%
Total	24	100

Section two of the questionnaire elicited information on Ease of use, Satisfaction Rate and Challenges of using KOHA ILS.

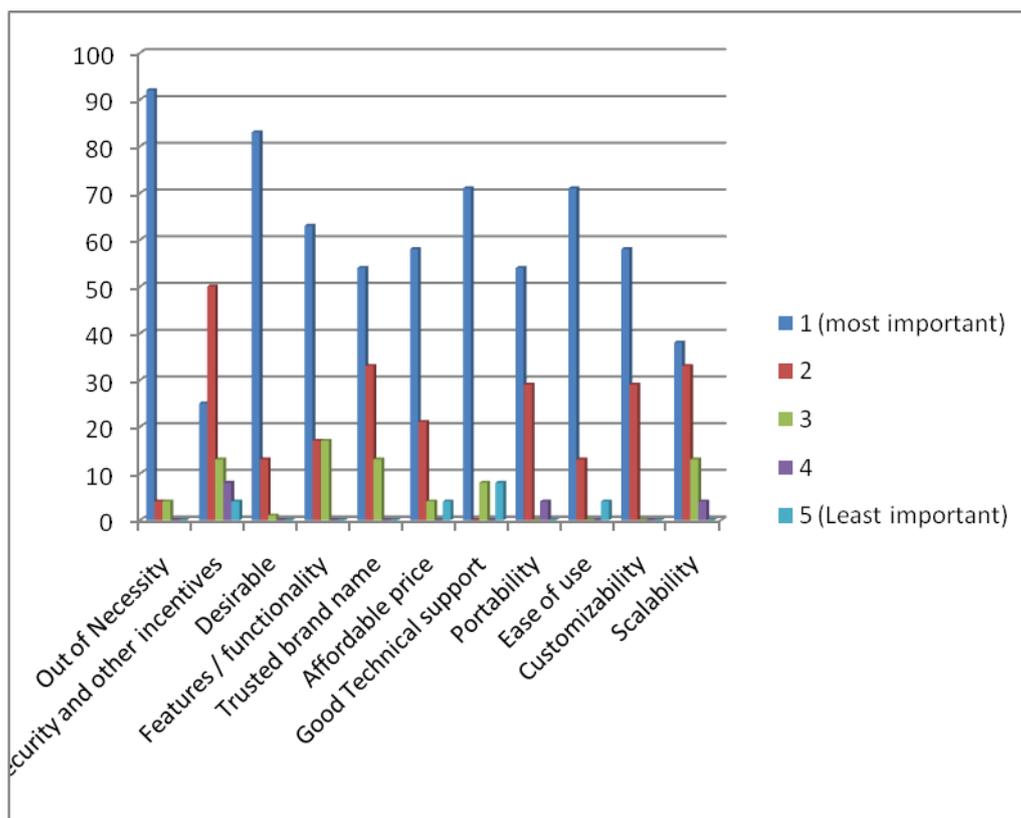


Figure 1: Chart showing reasons why the library choose KOHA

Figure 1 reveals that a large majority of library staff (92%) confirmed that KOHA ILS was chosen out of necessity, 50% said it was because it was secure, 71% said it was because it was easy to use, 83% said it was desirable to them, 63% implicated the available features and functionality, 54% said it was because it has a trusted brand name while 58% said it was used because of its affordability.

Table 4: Do you think that adoption of OPAC / online library will better facilitate improved access to library resources?

Access to resources	N=24	%
Yes	23	96%
No	7	4%
Total	24	100

Table 4 shows that most library staff (96%) think that the adoption of OPAC / online library will better facilitate improved access to library resources.

Table 5- How smoothly did the use of KOHA for online registration go?

Reg process	N=24	%
Extremely smoothly	11	46%
Smoothly	13	54%
Not sure	0	0
Difficult	0	0
Extremely difficult	0	0
Total	24	100

Table 5 shows that most staff (54%) said that the use of KOHA for online registration was smooth and 46% said it was extremely smooth.

Table 6- Overall satisfaction level

Satisfaction level	N=24	%
Very Satisfied	19	79
Somewhat Satisfied	5	21
Not sure	0	0
Somewhat Dissatisfied	0	0
Very Dissatisfied	0	0
Total	24	100

Table 6 shows that a majority of staff were very satisfied(79%) with the use of KOHA and nobody (0%) was dissatisfied.

Table 7- Use of KOHA for creating user accounts

Satisfaction level	N=24	%
Very easy to use	15	63
Somewhat easy to use	4	17
Not sure	1	4
Somewhat hard to use	1	4
Very hard to use	3	13
Total	24	100

Table 7 shows that a majority of library staff (63%) found it very easy to use KOHA while 13% found it very hard to use KOHA and 4% were not sure.

Table 8- What were the major challenges you encountered during the registration exercise?

Satisfaction level	N=24	%
Use of LAN	5	21
Students were not orderly	17	71
Not literate with use of computer	3	13
Overwhelming crowd	11	46
Power Outage	4	17
Total	24	100

Table 8 shows that the major challenge encountered with the registration exercise using of KOHA was the disorderly nature of the students (71%), 46% of staff implicated the overwhelming crowd of students that came to the library to use the system, 21% of staff implicated the fact that students were compelled to use the LAN , 17% implicated the power outages and 13% implicated the computer illiteracy level of some of the students.

Table 9 - What is your perception of how easy it is for library patrons to make self-service requests online for renewals and holds?

Satisfaction level	N=24	%
Very easy	9	38
Somewhat easy	8	33
Not sure	7	29
Somewhat hard	0	0
Very hard	0	0
Total	24	100

Table 9 shows that 38% of library patrons found it very easy to make self-service requests online for renewals and holds, 33% said it was somewhat easy and 29% were not sure.

Table 10: How would you rate the completeness of features of the circulation and patron accounts modules?

Satisfaction level	N=24	%
Has most features needed	14	58
Has some features needed	4	17
Not sure	2	8
Lack some features needed	4	17
Lack most features needed	0	0
Total	24	100

Table 10 shows that most library staff (58%) acknowledged that the circulation and patrons accounts modules contained most of the needed features while 17% of staff said it lacked some features.

The paper shows that KOHA was selected at the library out of necessity and not fully planned for. It further enumerated the prospects and challenges faced by the staff involved in the registration processes. The survey also found that Open Source ILSs are more cost effective than proprietary ILSs . The research enumerated overall staff satisfaction for the use of KOHA ILS.

10. CONCLUSION AND RECOMMENDATION:

The migration to KOHA Open access ILS from ITS and Virtua Proprietary ILSs at University of Jos is a astounding experience for the staff of the library and the University community at large. Open access ILS is more cost effective and aids ease of access to information. The use of KOHA ILS will solve the problem of manual processing and untimely statistics generation. Online registration database gives access to easy and accessible information retrieval in an efficient and effective manner. It was recommended that the software should be moved to the Wide Area Network (WAN) to ease congestion and encourage self-registration from library users.

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