Implementation of Koha Integrated Library Management Software (ILMS): The Babcock University Experience

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Abstract

This paper appraised the implementation process of Koha Integrated Library Management Software (ILMS) at the Babcock University (B.U.) Library, Nigeria. The software installation, data entry and data migration were successfully done and usage of the software began instantly. This study adopted a survey design using questionnaire as the instrument for gathering of data. It enumerates the experiences of B.U. Library in the implementation of Koha ILS using a total of 17 librarians and 24 technical staff that were part of the implementation program to illicit information. It explains strategies towards efficient migration of data from X-Lib to Koha, and elements responsible for adequate utilization of ILS. Analysis of data was only on challenges to the implementation program and strategies for successful implementation of Koha. This research was a result of the experiences of B.U. Library documented to support libraries. The software continues to receive improvement and upgrade by the user community worldwide. However, this research only describes the progress made and challenges faced on the implementation from June 2010. This research established no major problem since the implementation of the software at Babcock University Library. Library staff and majority of the library users
have commended the decision of the University Library for installing dynamic software like Koha.

Finding on Table 1 revealed that erratic power supply and insufficient manpower were bane for the smooth running of the software. It was also established on table 2 that ILS be incorporated as a course to be taught in the department of Information Resources Management (IRM) of Babcock University in order to train people who will manage the software. Moreover, 100% of the respondents agreed that seminars and workshops be organized. In addition, an effective collaboration between the ICT unit and the University Library was also seen as an advantage.

This work was based on facts and experiences gathered before and during the implementation period. It elaborates the basics and suggests steps toward successful implementation of ILS. It is intended to serve as stepping stone for libraries especially in Nigeria that are in dare need to implement automation software.

INTRODUCTION

The pursuit for excellence in all aspects of a university educational system made it imperative for universities around the world to rise up to their responsibilities. If a librarian is to deliver prompt and adequate services to the clients, he/she must adapt to the changing environment

and the use of current software to manage library routine activities. Information and communication technology (ICT) brought a lot of challenging issues to all facets of the university system and the library is not an exemption.

Automating a library is a unique decision that makes the library activities easy for prompt service delivery to the users. Every client expects quick response to requests as well as easy access to information. According to Cohn, Kelsey and Fiels (2001) library automation in the 90's means to computerize the traditional library functions of circulation, cataloguing, the public catalogue, acquisition and serials check-in. The present age library users needs can not be met with a mere automated library system which was the case in the past, no wonder Taylor (2004) argued that an integrated library system is more than just an online public access catalogues (OPACs), they are fully integrated computer systems that include various modules to perform different functions. The integration of the modules eliminates duplication of data and waste of effort. Osaniyi (2010) opine that several library management software have thrived with much patronage, most of the software have failed resulting to waste of time, fund, and energy. It is against this scenario that this paper wishes to discuss the implementation of a veritable ILS (Koha) at the Babcock University Library.

BRIEF ABOUT KOHA

Integrated library management software is designed to enhance all library routine activities as expected by the library users. A good and reliable ILS enhances management, control and easy access to information resources that are physical in a library and outside, for example, books, CD ROM, e-journal, e-books, e-databases, repositories, among others. It also helps to reduce time wastage in the delivery of services to the library users. According to Projektlink (2010) and Wikipedia (2012), Koha is the first open-source integrated library software (ILS) in use worldwide by public, school and special libraries which its development was steered by a growing community of libraries and users collaborating to achieve their technological goal. The name *koha* comes from a Mãori term for a "*gift*" or "*donation*". Koha is a web-based ILS, with a SQL database (MySql preferred) backend, cataloguing data stored in MARC and accessible via Z39.50 (Wikipedia, 2012).
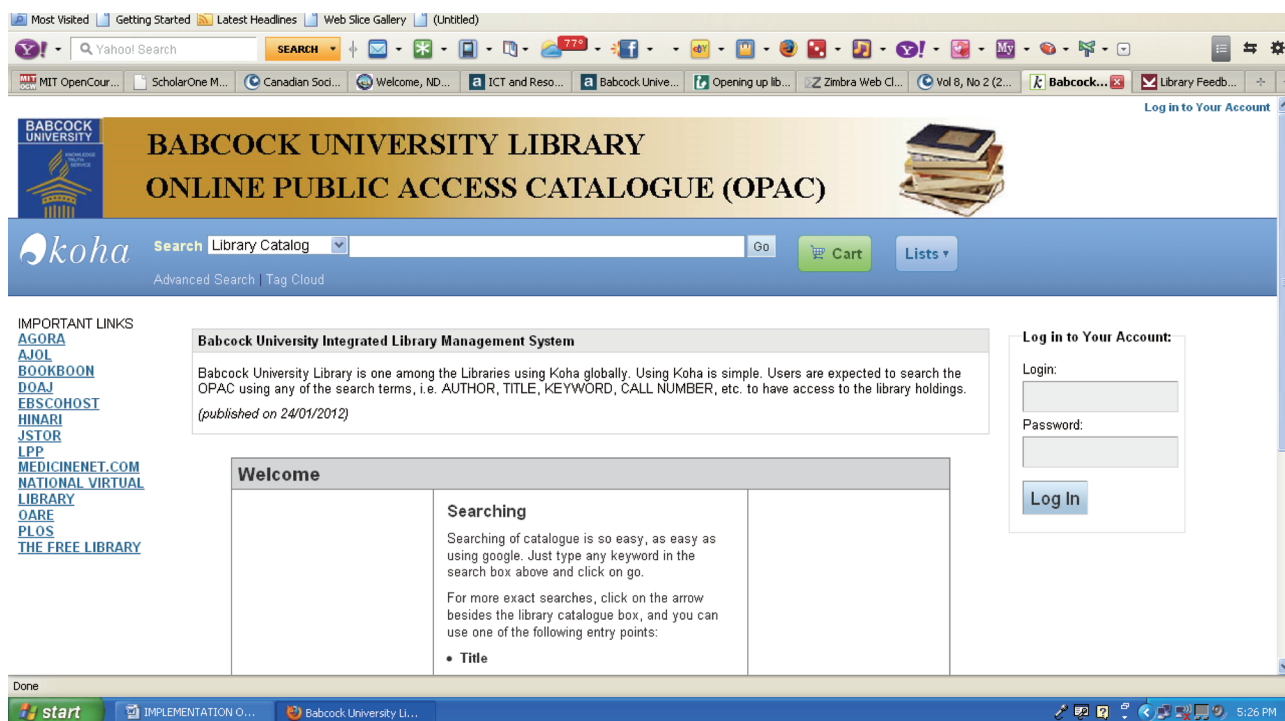

Figure 1
Babcock University Library ILS User's Interface

Koha user's interface is very configurable and adaptable which has been translated into many languages. It has most of the features that would be expected in an ILS, including simple clear interface for librarians and members (patrons), union catalog facility, customizable search, circulation and borrower management, serials system for magazines or newspapers among others (Wikipedia, 2012). Migration of data from one ILS to Koha can be done easily. Different activities that were usually done manually are collaboratively done with an automated system integrating all the modules.

Koha software according to Projektlink (2010) was initially developed in New Zealand by Katipo Communications Limited and first deployed in January of 2000 for Horowhenua Library Trust. Since the original implementation, Koha has been adopted by thousands of libraries world wide, 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. The developers have always improved its features with the collaborating effort of the user community through a superb feedback mechanism. This method makes the software best among equals. A comparative study by Yang, Hofmann and Weeks (2009) affirm that Koha is an ILS that has state of the art web interface, enriched content, faceted navigation, keyword searching, user contribution and Rich Site Summary (RSS) feeds.

THE BABCOCK UNIVERSITY LIBRARY EXPERIENCE

Babcock University Library has evolved through the years from 1959 to date serving as a College Library, Seminary Library and now University Library. This transition presented various forms of challenges which of course were not insurmountable. The main library is situated at the centre of core academic area of Babcock University and serves as the academic resource of last recourse. .

There are five branch libraries located within the host School or Department that caters for the information, research and learning needs of users.

1. EAH I Library: This is located on the right wing upstairs of School of Education and Humanities. It is a departmental library for students of Religious studies and Theology.

2. EAH 2 Library: This is located downstairs below EAH I Library. It serves students of History and International Studies.

3. SAT I Library is the home for all Science collections except Nursing.

4. SAT 2. Library: This is located downstairs directly under SAT I Library. The collection is solely on Nursing, Allied Health and Medical Science

5. Law Library: The Law library at Iperu Campus is fully stocked with law reports, law reviews, judgments of Supreme Court of Nigeria, textbooks and high profile Journals.

The library subscribes to electronic databases like EBSCO, AGORA, DOAJ, AJOL, OARE, HINARI and Nigerian Virtual Library to mention a few. It also subscribe to about 630 hardcopy journals with a total book stock of about 63,726 as at June 2012. http://www.babcockuni.edu.ng/main/index.php?option=com_content&view=article&id=186&Itemid=191

With the growing number of collections for the various courses floated in the University, couple with the departmentalization of the libraries, it was inevitable to use a software that will provide on-the-spot access to information, accurate records of collections, materials on loan, as well as linkage to all the libraries for efficient management and adequate services to the users. Therefore, in 2003, the Babcock University Library adopted X-Lib to enhance easy access to library collections. X-Lib according to Osaniyi (2010) was developed in Nigeria by a team of computer experts working in association with the Raw Materials Research Development Council (RMRDC) -- An agency of the Federal Ministry of Science and Technology. The first version of X-Lib was introduced in 1996. The mellinnium version was released in 2000 by BERAM Ltd. And RMRDC and this was the version Babcock Library implemented.

The choice of X-Lib was based on the need to automate the routine library activities and services including acquisition, cataloguing, circulation and serials control in order to serve the teeming users effectively. Looking at various options available, X-Lib seemed to be the only viable option to achieve the desired objectives. The software served for some time and later became prone to several challenges which were insurmountable. Some of the challenges were inherent without solution since the source code was not released to the I.T. librarian to resolve any minor challenge that may arise during the course of its usage. This major hindrance was highlighted by Osaniyi (2010) as an issue with proprietary software. He emphasized that the attitude of vendors to support their clients was unacceptable, which resulted to most users abandoning the software and began a fresh search for another. This was supported by Hassan (2011) who argued that commercial vendors were not very supportive for library schools in offering their software at nominal cost/free of cost. This was why Osaniyi (2010) lamented that a major problem that libraries in Nigeria have with international vendors is largely due to factors related to cost and support. He noted that technical support for the integrated library systems was either not available or unreliable.

Every contact made by the Babcock University Library with the vendor resulted to futility as his demands were daunting. The software was also susceptible to virus attacks and incompatible with other software/systems leading to its inability to share resources with other libraries through the intranet/internet. Some drawbacks of X-Lib identified by Osaniyi (2010) where improvement was required were to switch quickly from one module to another, provision for end-users reports, flexibility of reports to allow for individual site customization; quick response time; ability to conduct multiple field searches simultaneously; and most importantly, vendor maintenance support. Furthermore, X-Lib remained a closed proprietary system which according to Breeding (2009), limits the ways the library can access the systems interfaces to view, print and export data. The library remains dependent on the creators of the software to extend the functionality of the system and to access or manipulate its data in ways not supported in the delivered interfaces.

The problems posed by X-Lib stood against the University library's desires and purposes for installing the software when it was time to maximize its usage and also to link the software to the internet for efficient service delivery to the library users. The University library made efforts to keep X-Lib running but with the changing face of the 21st century library on service delivery; the Librarians in 2010 decided to use direct conversion method by discontinuing its usage and opted for Koha integrated library management software.

The Babcock University ILS (Koha) version 3.0 run on a Linux OS system with a 500GB HDD installed by Projektlink Konsult Limited. The robust HDD gives enough room for the library collections. These include books, journal, CD ROM, e-book, e-journal, students' project and papers presented within the university, are made accessible to registered library users. It is interesting to state that configuration and customization of the software to meet users' needs was done by the I.T. Librarian. The software has all relevant modules to manage library routine activities for effective service delivery to the library users. It is user friendly and internet compliant which allow users to interact with the OPAC within and outside the university environs. The software enhances access to the copious electronic information resources and e-books on the internet since the user's interface (OPAC) supports upload of important links that enhances users' research beyond the system.

According to Cohn *et al.* (2001), users' expectations which are in line with what Koha offer include quick response time to complex queries across myriad of databases, graphical interface through which they access resources; access to same resources in the library that can be accessed from remote locations, such as their homes and offices; 24/7 access to library resources; and systems that allow maximum opportunity for "self-service"

features and user-initiated manipulation of the system, among others.

Objectives of the Study

This study tries to achieve the following objectives:

1. Enumerate the experience of Babcock University Library in the implementation of Koha ILS.
2. Identify some elements towards adequate utilization of ILS.
3. Examine challenges and prospects to the implementation program.
4. Explain strategies towards migration of data from X-Lib to Koha.
5. Suggest strategies for successful implementation of Koha.

Literature Review

It was rightly asserted by Karetzky (1998) that the best sources of reliable information about a particular library application are usually librarians who are currently using it. In selecting software for library automation, first, it is important to have adequate knowledge of the available software. Secondly, verify the software capabilities, weaknesses, and possibility to meet the needs of users as well as future improvements. Osaniyi (2010) stressed that the wrong package can lead to failure to support an important process; supporting a process inaccurately or inefficiently; unhappy clients; loss of patronage; etc. While on the other hand, the right package provides employees with the right tools for the job and can lead to substantial improvement in services. Among the libraries that are presently using Koha worldwide, none has recorded any system breakdown. The only challenge to the smooth running of the software has been erratic power supply. This notable challenge is external from the software. This in no doubt was the case in India as identified by Neelakandan, Duraisekar, Balasubramani and Srinivasa (2010).

Koha is an "open source", which according to Boss (2008) is free software that includes the original source code used to create it so that users can modify to make it work better for them. It also includes the right of redistribution; therefore, there may be both open source and proprietary products that are based on open source software. Conversely, a closed, proprietary system limits the ways the library can access the underlying data (Breeding, 2009). Koha has several features that makes it usable at both staff and clients' interface. Müller (2012) ranked Koha ILS the most complete FOSS ILS because of a number of functions including routing periodicals, inventory control, authorities, generation of notices to customers, order tracking, among others. Some of these features are listed on OSSlabs website http://www.osslabs.biz/koha/features

Web 2.0 Features

Wikipedia (2012) observed that Web 2.0 was first used

in 1999 by Darcy DiNucci, a consultant on electronic information design and has since been upgraded to 3.0 with viable features bringing together people with systems. Web 2.0 is related to Library 2.0 and of course they tend to perform the same function and achieve the same set of goal. Library 2.0 is a new innovation incorporated into ILS to bring together library users and the librarian at every point in time. The reason for library 2.0 according to Xiao and Sajo (2011) is to encourage and foster active user participation and integrating users' needs into the processes of planning and designing in library services and library space. Koha supports several useful web 2.0 features (Boss, 2008). One of the advantages of web 2.0 technology according to Raj Technology (2011) is its ability to change the business processes by productivity gains and making users' feedback an integral part of development processes. But many I.T. managers are shying away from the technology due to lack of knowledge on how it will fit into their business needs. While some are still lagging behind to utilize the benefits of the technology, an upgraded version, web 3.0 is on the way. The infusion of Library 2.0 into ILS is supporting the librarians extensively to deliver better services to library users.

Interestingly, Koha developers built library 2.0 technologies to ensure that library users and librarians interact to accelerate service delivery to adequately satisfy users' needs. The technology provides feedback from users, giving librarians the opportunity to know the challenges faced by the library users to access library resources and services. The technology also provides patrons the opportunity to critic and submit comments on services rendered and on any item in the catalog based on their perception. Staff can decide to moderate the comments before they are displayed on the OPAC.

CONSIDERATIONS FOR PROPER UTILIZATION OF AN ILS

1. Use the Right ILS

Several authors confirmed that to gain from an ILS, the right package must be installed. Osaniyi (2010) stressed that the wrong package can lead to failure while the right package provides employees with the right tools for the job and can lead to substantial improvement in services. An evaluation of free and open source ILS platforms offered to the library community by Müller (2012) suggested three important trends in choosing the right ILS; these are democratization of access to software (input of every stakeholder), collaborative networking and personalization of software. These three key points are indispensable to ascertain a good ILS. But in addition to those salient points, the librarians should realize that in choosing an ILS, they must be certain and

emphatic, considering the flexibility (easy to customize), accessibility (easy for collaboration, flow of data) and dependability (manageable, easy to fix bugs).

2. Involve Users During Iimplementation and Get Their Feedback

This age of technological advancement left no library user aloof. Users are the library main stay and their satisfaction must be guaranteed. Jena and Khuntia (2008) strongly affirmed that library 2.0 could revitalize the ways we serve and interact with our customers. They stated that the heart of library 2.0 is user-centred service. It is a model for library service that encourages constant and purposeful change, inviting user participation in the creation of both the physical and virtual services they want supported by consistently evaluating services.

Libraries are advised to involve users during implementation stage. However, they are also encouraged to implement systems that support Library 2.0 to ensure feedback from users to accelerate services. Various methods of harvesting user's feedback have been explored. If the library must fulfill her mission of making information accessible and usable, then, users must be part of any program that affects them. At Babcock University Library, feedback suggestion boxes and posting boards are located at prominent public areas at each campus library.
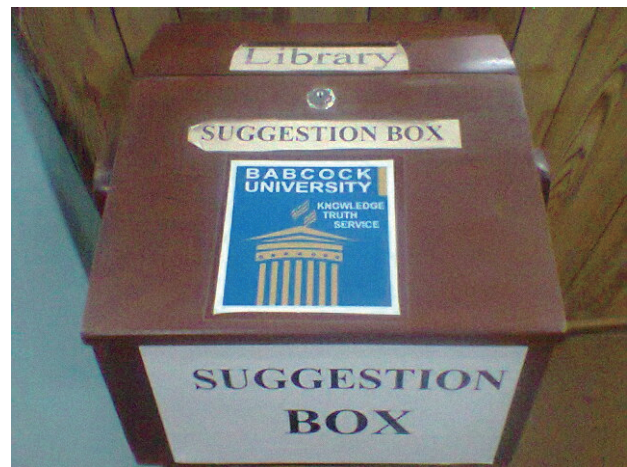

Figure 2
A Suggestion Box at Babcock University Library

However, Babcock University Library OPAC provides a feedback mechanism through which each user can communicate his/her request and perception about the library services. Feedback mechanism provides library an opportunity to improve, modify and upgrade services rendered to users. In fact, with the new web tools, information can be released to flow in every direction, i.e. library to user, user to library, library to library and user to user (Jena *et al.*, 2008).

3. Educate Library Staff/Users on Proper Use of Library Software

A critical element to achieving success after an

implementation program is to educate the users to effectively utilize the software. Igbena (1990) defined user education as a process of making library patrons learn how to make effective and efficient use of library resources and information through the acquisition of skills in identification, location, search, retrieval and exploitation of information.

Learning is an on going process therefore, educating library staff and users to maximize the use of library software is very essential. Tucker (1980) noted that user education is library instruction (educating the library user) and library education (training for the prospective librarian) developed simultaneously. According to Tucker (1980) user education was to enhance and strengthen the liberal arts and bibliographical research aspects of undergraduate. Rahman, Khatun and Mezbah-ul-Islam (2011) emphasized that a standard formal library education should have devoted faculty members, well-resourced department, and scientifically liable curriculum indicating clear relationship between theory and practice. Hassan (2011) opine that to ensure proper usage, manpower to handle installation, alternation and alignment of system processes and training of the staff and users of the system must be considered.

Babcock University academic curriculum includes "use of library and study skills", a two-unit course to educate every student on how to use the library tools and resources in their first year at school. The process adopted by the University Library to educate library users to use the software both within and outside the university community is tutorial, seminar, one-to-one discussion, workshop, and the two-unit course among others. These methods have shown great progress and impact over the years. Most of the library users who went through any of the process proved self reliant in searching, use of ILS, access and retrieving of information.

However, educating library users goes beyond rhetoric. Shaw (2008) highlighted three outstanding viewpoints in education. These are traditional, scientific and progressive education. According to her, traditional education is a "subject-matter centered", which looks to the past for its ideals and contents. The scientific education is "adult" or "society-centered". She noted that preparation for life is its justification and it seeks to determine what is to be taught in the public schools through a careful consideration of the needs of the present. The third being the progressive education also known as "child-centered". This maintains that the teacher should be a guide, whose duty is to observe the spontaneous activities of children, and to study their mental and emotional reactions.

Basically, among these three types of education, it is clear that none can be left out in the process of educating a learner. Each of the method makes significant impact on a learner. However, most accepted by a larger majority is the progressive education since it brings the learner in direct contact (one-to-one) with the teacher. The teacher is expected to be a guide who gives direction and examples, Do-As-I-Do "DAID" for the learner to follow. The Librarians of this age have a task to enshrine progressive education as their culture and ensure that library users are guided properly to effectively utilize the resources in their libraries. A constant contact, provision of user education and guide will improve understanding and usage of library tools, quick information search and retrieval by users.

Training librarians who in turn train the users is very important. Chiware (2007) stated that some university libraries have established dedicated IT units in order to address the problem of lack of IT skills among librarians. And where integrated library systems have been implemented, vendor training has always ensured that staff is adequately trained to run the turn-key projects.

Taking a look at user education as librarian's duty, it require concerted effort firstly by teaching the learners in the classroom (theoretical) and secondly, taking time to guide them one-to-one (practical) using the other methods which include orientation, workshop, seminars among others. According to Aina and Omeluzor (2008), the importance of library user education can not be over emphasized. This is because there cannot be a connection between the user and the tools without adequate education given to the user who may not have any prior knowledge how to use library resources and tools.

In line with the B.U. Library's policy towards educating users, workshops, seminars, classes, among others have usually been held to educate both staff and students of the University. The approach was seen as impressive as most of the participants commended the librarians for organizing such timely programmes that have put them ahead of their peers in other institutions of higher learning.

Figure 3
A Cross-Section of Babcock University Library Staff Undergoing Training

4. Create Awareness

Awareness is very important. Users must be duly informed

of recent information that have been added to the library collections. This can be done through current awareness by a discrete form. The collections will be separated and list forwarded to the users through their email addresses. Also, new collections could be placed in a display shelf for a specified period of time for users to glance through. Koha also has an opac display that notifies users of any addition to the collections.

CHALLENGES FACED AND PROSPECTS

The Koha implementation process began when the Librarians at Babcock University Library supported the bid to have ILS that will not serve only as OPAC to the users, but holistic, combining different features capable of enhancing learning, teaching and research as well as access to library information resources within and outside the university environs. Several ILS were examined and a committee was set up to visit some institutions that already had their software running to ascertain the reliability of Koha as the best option.

The action was in conformity with Breeding (2012), that a thorough process of evaluating an integrated library system (ILS) today would not be complete without also weighing the open source ILS products against their proprietary counterparts. As libraries make decisions about what software to use when automating their operations, it is vital for decision-makers to have a solid grasp of the available options.

A number of issues that require a check-list must be considered before accepting the procurement, installation and use of an ILS. Müller (2012) strongly affirmed that an ILS should have routing periodicals, inventory control, authorities, generation of notices to customers, order tracking, among others. Baumgartner and Payr (2001) cited by Osaniyi (2010) opine that evaluation of library software becomes more and more important, on the one hand because of the growing offer of software from which good products have to be chosen, on the other hand in order to promote software quality and set quality standards.

A major challenge faced during the implementation was in course of data entry. The fields to be filled for a record were more and using the zebra crossing to access external database like Library of Congress at the initial take-off did not display request. However, the data entry fields were later modified by the I.T. Librarian who eliminated the ones that were not necessary.

Koha an open source ILS has no vendor to dictate and argue issues with librarians. It has a customizable OPAC that can display vital information about the institution and other important sites. Bearing in mind challenges that were usually faced by librarians to meet users' needs, koha has a good prospect. Since its development in 1999 and implemented by a US library in 2002, its users have increased to about 291 libraries and information centres around the world in 2012 with US having the largest number of 90. These include libraries and information centres that are visible online. There are many that are running as stand-alone on an intranet. Therefore, the prospect for its improvement and reliability is very high. The growing community of users is also an advantage for any library that wishes to implement the software because of support and collaborations (Koha user worldwide, accessible at: http://wiki.koha-community.org/wiki/Koha_Users_Worldwide#Africa).

STRATEGIES TOWARDS SUCCESSFUL DATA MIGRATION AND CONVERSION

Data Migration from X-Lib to Koha, a Practical Experience

In the case of migrating data from another software into Koha after a successful installation, the following procedures could be used hence it yielded a good outcome at Babcock University Library.

Prior to the implementation of Koha at Babcock University Library, X-Lib was used for almost six years, from 2003 - 2008, but after the installation of Koha, it became necessary to migrate usable data from X-Lib into Koha in order to populate the database and also to enhance access to the collections in the library.

Migration of data from X-Lib to Koha posed some challenges, this was because, X-Lib is a proprietary software which did not provide any means to export out its data either as a comma separated values (CSV) or as machine readable catalog (MARC) data. Either format would have presented a much easier conversion from X-Lib to Koha. The major challenge was then how to get the data in the proprietary X-Lib system out in a format useful to import into Koha.

Careful analysis of the X-Lib files revealed a database system of files based on Foxpro. The key files containing relevant tables were identified. After identifying these files, the next step was to find ways to merge the files and extract the data into CSV format. Several efforts were made to use the open source programmes – "open office" and "libre office" to open and massage the data into a format that can easily be exported to CSV without success. However Goggling for Database file (DBF) to CSV converter (Foxpro files are dbf format) turned up DBFTOCSV, a perl script that did a wonderful job of converting the Xlib dbf files into a comma separated value (CSV) file.

After generating the CSV file, the next challenge was to convert the CSV file into a format that can be imported into Koha. The format for data import that Koha support is MARC. To convert the CSV into MARC, the very efficient utility "MarcEdit" was used. MarcEdit is a free programme, which can do all sorts of cool stuffs with your Marc data.

Using MarcEdit

Before data can be imported into Koha, certain data must be present in every record. They include the code for the permanent location, the code for the current location, the item type code, and the accession number. In this circumstance, the accession numbers were already present in the X-Lib data, but the others were added as an extra column in the CSV. The X-Llib data were cleaned up to reduce error in the catalogue. These were mainly in the area of spelling mistakes and duplicate accession numbers.

Conversion to MARC

Koha can only import data in the MARC format. This can be any flavour but must match the configured MARC flavour in a particular Koha installation. Babcock University Koha uses MARC21 flavour. In order to get the CSV into MARC21, the MarcEdit delimited text translator utility was used. The delimited text translator allows you to convert data in CSV into MarcEdit's (mrk) format. The "mrk" format, which is a text file with the appropriate mark fields given to records was then compiled into a binary Marc file. After the conversion into MARC using MarcEdit, the generated MARC file was imported into Koha using the bulkmarcimport script. At the end of the conversion, a total of 23,274 records were imported into the Koha database from X-Lib for Babcock University Library. This process gave the University library ILS a boost, because it became populated with more data which helps to reduce the amount of time that would have been used to key-in those data back into the software.

KOHA ILS Breakthrough

Several improvements have gone into ILS which koha was not an exemption. On April, 2012, The Koha developer team announced the release of Koha 3.8.0, the third major release since the team shifted to time based releases. According to Cormack (2012), Koha 3.8.0 contains over 130 enhancements with over 1000 change sets from 71 developers. It is worthy to mention here based on a publication on Koha community website that Koha is the first free and open source ILS package. Development is sponsored by libraries of varying types and sizes, volunteers, and support companies from around the world http://koha-community.org/koha-3-8-0-released/

The koha users' community that has grown over the years have made meaningful contributions to the improvement of the ILS given users the leverage to enjoy the software in their various libraries. To get the best out of automation software, Breeding (2011) advised that libraries need automation systems well aligned with their current and anticipated priorities. Presently koha is taking a lead amongst the ILS as most libraries and corporate organizations that are using it. Ayre in 2010 posted on her blog that Koha and Evergreen shine in Breeding ILS Survey results http://rscel.evergreen-ils.org/node/1541 beside, Koha information about upgrades were released almost on weekly bases which users access free, download, install and upgrade to newer versions at will.

DATA ANALYSIS AND DISCUSSION

It was observed there were some challenges faced during the implementation program. Therefore, the researchers ascertain what level of challenge that was faced. The result from the table below shows some visible managerial challenges.

Table 1
Challenges to the Implementation Program

	Item	Librarian				Technical			
		Strongly agreed	Agreed	Disagreed	Strongly disagreed	Strongly agreed	Agreed	Disagreed	Strongly disagreed
1	Lack of supervision	4 (23.5%)		10 (58.8%)	3 (17.6%)	5 (20%)	7 (28%)	10 (40%)	3 (12%)
2	Inadequate managerial support			6 (35.3%)	11 (64.7%)	6 (24%)	3 (12%)	9 (36%)	7 (28%)
3	Lack of motivation from the management		4 (23.5%)	7 (41.2%)	6 (35.3%)	6 (24%)	3 (12%)	9 (36%)	7 (28%)
4	Erratic power supply	10 (58.8%)			7 (41.2%)	7 (28%)	8 (32%)	2 (8%)	8 (32%)
5	Insufficient manpower	11 (64.7%)	3 (17.6%)	3 (17.6%)		8 (32%)	8 (32%)	6 (24%)	3 (12%)

Table 1 shows that 4 (23.5%), 10 (58.8%) and 11 (64.7%) of the respondents among the Librarians strongly agreed that lack of supervision, erratic power supply and insufficient manpower were major challenges to the ILS implementation, while 10 (58.8%), 11 (64.75) disagreed that supervision and support from the management were major challenges to the implementation program. On the other hand, 7 (28%), 8 (32%) and 6 (24%) among the Technical staff strongly agreed that erratic power supply, insufficient manpower, and inadequate support from the

management were major challenges. This result revealed that erratic power supply, insufficient manpower and lack of motivation from the management were major hindrances to the ILMS implementation at the B.U.

library. This was supported by Neelakandan *et al.* (2010) who also identified erratic power supply as a challenge to the implementation of Koha at Bharathidasan University Library, India.

Table 2
Strategies for Improving an ILS Implementation

	Strategies	Librarian				Technical			
		Strongly agreed	Agreed	Disagreed	Strongly disagreed	Strongly agreed	Agreed	Disagreed	Strongly disagreed
1	The library should be provided with private generating set	13 (75.5%)	4 (23.5%)			17 (68%)	8 (32%)		
2	Librarians should be sent for training on ILMS skills	13 (75.5%)	4 (23.5%)			16 (64%)	9 (36%)		
3	Management of ILMS skills should be integrated into the library school curriculum	13 (75.5%)	4 (23.5%)			20 (80%)	5 (20%)		
4	There should be an enhanced technical collaboration between the library and the ICT unit.	13 (75.5%)	4 (23.5%)			20 (80%)	5 (20%)		
5	Library should organized seminars and workshops to train the library staff	17 (100%)				25 (100%)			

Findings on Table 2 indicate that none of the respondents disagreed with the strategies to improve future implementation of ILS program. The result shows that 13 (75.5%) of the 17 Librarians and 17 (68%), 16 (64%) and 20 (80%) of the Technical staff in this study strongly agreed that library be provided with a private generating set, librarians be trained on the use of ILS, ILS training skill be incorporated into the library school curriculum, and technical collaboration between the library and the ICT unit be enhanced. All the 17 (100%) and 25 (100%) of the Librarians and Technical staff in this study also supported the view that library should organize seminars and workshops to train the library staff. This confirmed Chiware (2007) claim that some universities libraries have established dedicated IT units in order to address the problem of lack of IT skills among librarians. This result also shows that training, seminar and workshop are inevitable to improve staff and users skills in the management and use of ILS. This was supported by Hassan (2011) who opines that manpower to handle installation, alternation and alignment of system and training of the staff and users of the system are integral.

DISCUSSION OF FINDINGS

Reliability of the software was not looked into since it was not part of the objectives, but available researches have shown that Koha is reliable and efficient. However, there has not been any major problem since the implementation of the software at Babcock University Library. Library staff and majority of the library users have commended the decision of the University Library for installing dynamic software like Koha.

Finding on Table 1 revealed that erratic power supply and insufficient manpower are bane for the smooth running of the software. It was also established on Table 2 that ILS be incorporated as a course to be taught in the department of Information Resources Management (IRM) of the University in order to train people who will manage the software.

Moreover, 100% of the respondents agreed that seminars and workshops be organized in addition to an effective collaboration between the ICT unit of the University and the University Library.

RECOMMENDATIONS

The researchers having analyzed this work recommend as follows:

1. Librarians and users should be involved in any ILS implementation program;
2. Effort be intensified to educate both staff and users of the library on effective use of library software;
3. Workshop and seminar attendance be made mandatory for the librarians and technical staff of the Library to be able to fix any minor challenge that may arise while using the software;
4. The library should be provided with a private generating set as backup against erratic power supply to ensure the smooth running of the server;
5. Courses like "Managing Integrated Library Management Software" (MILMS) be included into the Information Resources Management department's curriculum of the University in order for students to acquire needed skills.

CONCLUSION

Easy access to information resources in a library collection and beyond is one reason behind every installation of an ILS. Anything short of what is expected of an ILS in this present age will breach its installation. Utilizing information technology (I.T.) to change the ways and manners that library offer services to her users demands conscious effort and determination. Koha's ability to accommodate a large collection, ability to integrate the basic library operations, easy to configure, quick response time, menu driven, adaptable to other systems/software, easy to use and zebra crossing among others makes it a viable option for the University Library. Through the implementation process, several lessons were learnt while major breakthroughs were made to correct past mistakes in chosen ILS in the present 21st century. Following the decision of the University Library through the implementation of Koha, users' satisfaction in the area of quick information access and retrieval, online search for e-resources, OPAC search, client's registration, charging and discharging of resources among others were done with ease.

As the ILS continue to receive wide acceptance by the user community, it is anticipated that the programmers and the user community will be proactive to improve the software to be more and more adaptable, user friendly, easy bug fixing and training the trainers.

In this fast growing and dynamic information age, library automation systems that are not aimed at meeting the needs of the library users will receive less patronage. Studies have shown that most libraries are discontinuing use of proprietary software to viable open source. This in no doubt will soon phase off the close systems. Management of institutions should imbibe the spirit of supporting programs that will enhance the functions of the library for efficient services to the users.

Since making information accessible and satisfying the library users are major reasons for establishing the library, delivery of services can not be over emphasized. If libraries in this age must prove to be the hob of academic activity, a dynamic system that will incorporate new and yet to be conceived features must be the focus. Libraries of today must be aggressive to provide access to information within and outside the library through a viable system.

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