



INTEGRATED LIBRARY SYSTEM (ILS): AN OPTION FOR LIBRARY AND INFORMATION MANAGEMENT — A REVIEW OF KOHA ILS AT BABCOCK UNIVERSITY LIBRARY, NIGERIA

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Abstract

The purpose of this paper is to review the capability of integrated library system as an option for managing library information resources using Koha ILS used at Babcock University as a case study. The paper is a review of the functions and performance of Koha ILS. It also includes personal experiences of librarians and the technical staff at Babcock University Library. The review exposes the potency of ILS in library management. It portrays Koha as a constant system in managing library operations and services. This was evident as the system has engendered adequate and quality services to library users at Babcock University without hitches. The review only focused on Koha ILS implemented at Babcock University. It revealed the benefits and strengths of ILS to library performance. This review is important hence it will encourage libraries to implement feasible systems to improve their services to the library users. Koha ILS has revolutionized library operations and services at Babcock University Library for the past three years. The implementation has drawn the attention of libraries in need of implementing ILS at their libraries to understudy the system. It has therefore given those libraries the opportunity to learn and implement same.

Koha ILS is appealing to library users of this generation, because it is user friendly with inbuilt social networking features compatible with other electronic information systems. It is expected that the experiences shared in this work will motivate other libraries to implement a viable ILS like Koha for effective service delivery to the library users.

Key Words: Koha, integrated, library, system, management, Online, Public, Access, Catalogues, Babcock University.

Introduction

Information and communication technology (ICT) has continued to support the use and dissemination of information in libraries and information centers across the world. The result of such support has yielded so much, leading to the introduction of new systems that are absorbing existing ones or perhaps merging together systems with the migration of data to the most functional and acceptable system. This no doubt has caused librarians and information professionals to think of the possible ways of approaching delivery of services to the library patrons. The prime purpose for installing any system is to overcome challenges inherent in an organization in order to achieve unprecedented level of progress. The pursuit for excellence in all aspects of a university system around the world also made every university and of-course libraries to rise against their responsibilities. For librarian to deliver quality services to the library's teeming clients, he/she must adapt to the changing environment and adopt current system to manage library routine activities. Besides, there is need to take drastic decisions concerning viable means to make information available and accessible as at when needed. It is a fact that information that is available in a library database or on shelves but not accessible is valueless.

Libraries of today are viewed by library users as the power house for information provision. According to Igbo and Imo (2010) the library grapples with the challenges of acquiring, processing and making available up-to-date and relevant resources that should satisfy user's information needs. No wonder Igbo and Imo emphatically said the

Patrons. This underlines the implementation of viable systems that will enhance services of a library.

Prior to the introduction and use of integrated library system (ILS) in libraries across the world, traditional methods of information management hold sway all library activities. Uses of ILS in libraries according to Haravu (2009) dates back to mid-1950s and were in phases. The first phase (1950s -1960s) was the middle generation systems; (1960s-1970s) was the Internet generation (Web 1.0); (1900s-2000) and the Post 2000 was the Web 2.0 Era. These periods of ILS evolution witnessed exciting and drastic changes that affects library services ail over the world. Moving from agrarian to present information/knowledge era, it was obvious that librarians and information professionals worked hand-in-hand with system analyst to ensure the actualization of the dreams of today.

Presently, the information/knowledge era becomes the most interesting as revolution in the use of ICT gave edge to open source software, computerization of library operations and services, sharing of database resources, collaborations, online cataloguing, among others which made it imperative for librarians to join the 'moving train' of information evolution since they cannot be left behind. The traditional methods of counting visitors who visits a library for statistics along with long queue requests for charging and discharging at the circulation desk has long disappeared. This is because library users of today can access libraries and resources from their comfort zones through ILS.

Recent library software packages came

Module, circulation module, OPAC among others. The Web became the platform of choice for software. Development philosophies changed from finished product to work-in-progress and frequent update delivered over the web; the web has become from an information delivery only platform to a participative platform. Ordinary individuals contributed via blogs, wikis, podcasts and social networks (Haravu, 2009). The compatibility of most ILS with Internet made it easy since it can function effectively as most of them are Internet compliant.

Again, this era witnessed a significant use and access to the Internet more than ever. One may wonder how users would prefer traditional catalogue to an ILS. This assumption lingers in the minds of many. However, the acceptability and use of a system with numerous encouraging feedbacks through an ILS feedback mechanism to a library indicates that the system is meeting the needs of the users.

Despite notable achievements through use of ILS, Osaniyi (2010) lamented that some ILS that thrived with much patronage have failed resulting to waste of time, fund, and energy. Babcock University (BU) Library implemented Koha ILS in 2010, after the library's operations and services met a dead end and were brought to a halt due to failure of Xlib system. Xlib was installed at BU in 2003 and was in use until 2009 when the library forcefully used a direct conversion method to pull out of the system. Omeluzor, et. al. (2012) noted that Xlib system was susceptible to virus attacks, incompatible with other systems and noncompliant with the Internet which hinders collaboration with other libraries. Another major challenge with the system was lack of technical support from the vendor when need arise. Most absurd was the ownership of the source code by the vendor which is against current open source

The University Library in order to sustain quality services already provided and enjoyed by users through the initial system before its failure, constituted a committee to carry out a feasibility study of a viable and durable system. After several meetings, the University library management resolved to adopt Koha integrated library system. The system has all relevant modules to manage library routine activities. There were several reasons for the choice of Koha, among which were

1. Koha is the first free and open source software library automation package (ILS), which development was sponsored by libraries of varying types and sizes, volunteers, and support companies from around the world (<http://koha-community.org/>).
2. The system is Internet compliant which give users leverage to interact with its OPAC, for example <http://library.babcock.edu.ng/> accessible within and outside the university environment.
3. It is widely used and accepted both within and outside Nigeria by several information centers and libraries of various sizes for some years now.
4. It is one among the best ILS adopted by many libraries in the world.

Koha ILS has continued to support libraries, penetrating into all areas of information management with an aim to provide quick access, easy retrieval and use of information, statistical report, among others. On the other hand the system provides support and answers to user's query by directing them to the location of the materials within the library collections and also enroute or direct users to external databases. The software is created and managed by a team of information experts and librarians around the world. The version installed at Babcock University has drawn librarians from

and under study the implementation procedure, management, and its functionality.

This paper reviews the capabilities of Koha integrated library system as an option for managing library information resources in a library.

Objective of the Study

This paper seeks to highlight the capabilities of ILS as option for library information management with a review of Koha ILS installed and used at Babcock University Library since 2010. Specific objectives of the study was to

- Know the future of integrated library system as panacea for library information management.

Literature Review

Access to library information resources has taken a new dimension with the combination of new features into integrated library systems (ILS) to enhance library operations and services. Almost every library in the world including Nigeria is adopting one system or another to ensure provision of access to information. Most libraries and information centers across Africa have adopted Koha (<http://wiki.koha-community.org/wiki/KohaUsers/Africa>). Haider (2009) strongly believes that innovation and development of ICTs and different library software and its application in the field of Library and Information Science (LIS) create changes in the entire library management system.

Before now it was difficult to ascertain materials owned by a library, access library holdings within and outside the library walls as well as retrieve materials. However, with an ILS in place, access to library anywhere and anytime is possible on a 24/7. Kudos to the librarians and staff who take pain to classify, create metadata and provides access to information online.

The main objective of an information retrieval system is to enable user (information

(Chowdhury, 2010). Again, Jetty, Anbu, John, Jain and Hopkinson (2011) records that the basic purpose of a library catalogue is to provide a record of the library holdings so that the resources in the library can be better utilized. This traditional aspiration has long been overtaken by events. An ILS gives features for collaboration, resources sharing and easy access to information more than a stand-alone catalogue. It also provides support for enhance services in form of feedback.

Requirements for Installation of Koha

Koha ILS could run on different operating system (OS). However, the decision to use a particular OS is borne out of the security implications. With a thought of implementing Koha in mind, the requirements may include

- A Linux server
- Apache
- MySQL
- Perl
- Root access to the server, and
- A better than average level of skill with the command line, Apache, and MySQL tools (<http://koha-community.org/download-koha/>).

Further installation requirements for the hardware and software are as noted here

- 1 GHz processor
- 1 Gigabyte of RAM
- 15 GB of hard drive space
- Monitor with at least 1024 by 768 screen resolution
- A USB port or a CD/DVD ROM (<http://www.codevcolasinski.com/koha.pdf>)

Koha Installation at Bu Library

Libraries all over the world have devised various methods of providing access to the resources available in their collections. Babcock University in Nigeria started with traditional catalogue combining both card and book catalogues with daunting limitations

2003 with the introduction of XLIB automation system followed by the full implementation of Koha in 2010 accessible via <http://library.babcock.edu.ng/>. The implementation added an improved service delivery to the library users. A power point presentation to assist users to learn how to use the OPAC for easy access to library resources was made available online <http://www.slideshare.net/someluzor> and for acquisition management on <http://www.slideshare.net/someluzor/acquisition-module-on-koha-integrated-library-system>

The decision to install Koha was as a result of frustration from a previous system that did not meet the needs of the library staff and her users since the library has evolved over the years as college library, seminary library and finally as university library. The BU Koha (ILS) was installed by Projektlink Konsult Limited. Since the installation and use, the system has remained stable without much challenge. The stability of the system helps in achieving huge tasks on a daily basis. After the implementation and migration of over 30,000 records from the previous system, more than 40,000 records have been entered into the system through direct data entry and importation from other systems online using the powerful zebra crossing feature available on Koha. Currently, Babcock university library system run on Ubuntu Linux server with a 500GB hard drive space, 2GB RAM. Since the library plans to embark on digitization of her locally generated materials such as students' project,

storage space has been expanded with an additional one terabyte hard drive.

Work Flow and Daily Activities on Koha ILS at BU Library

The University library designed a customized worksheet that is in line with the 'material entry' template on Koha. The draft at the initial time was shown to the chief cataloguer, serials librarian and the systems librarian. Modifications were made to capture every important detail. After going through the process of confirmation, it was accepted as a document known as '*Koha worksheet*'. It was then produce en mass. The reason for providing worksheet was to document the bibliographic information of a library material for easy/accurate entry of information into Koha ILS.

However, Koha allows an online cataloguing of materials available on LC online catalogue (<http://catalog.loc.gov/>). Webcat online catalogue (<http://www.worldcat.org/>) and others with the use of Z39.50 feature. The feature enhances the importation of bibliographic records from other online catalogues into Koha, thereby reducing time that would have been wasted through manual process of entering records. The cataloguing section of the BU library has five technical staff and four cataloguers that efficiently and diligently work assiduously to ensure access to library collections. It is important to state that the cataloguing and serials departments work tirelessly to ensure that bibliographic records are accessible on acquisition and subscription

BABCOCK UNIVERSITY LIBRARY					
Ilishan - Remo					
KOHA DATA ENTRY SHEET					
ISBN/ISSN					
Author					
Additional Author					
Title					
Edition					
Place of Pub					
Publisher					
Date of Pub					
Description	Pages	Accompanying material	Other Details	Binding	
Subject					
Type	No. of Copies		Nature of Acquisition	Price	
Location	Library Branch	Shelving Location			
Classmark					
Accession No	Date of ACQ.				

Fig. 1: BU Library Koha data entry sheet

The Choice of an ILS

The choice of an ILS is based on the need to provide quick access to library resources and services to users. The thirst for information today is incomparable with ten years ago. A library's effort to provide information is maximized with the introduction of electronic information resources which is relegating most libraries to the background. The use of Koha ILS with enhance features like Z39.50 for easy cataloguing and collaboration online, OPAC for access to bibliographic information and other viable modules can not be over emphasized.

Furthermore, the way Koha runs is fantastic. Each time a new request is sent through the web server (i.e. a user has clicked on a link) the system has to load every information. The web server has to (1) start up a new Perl interpreter (2) Perl has to load up all the Koha source code and compile it then (3) Koha has to load up its configuration options and related data, and then finally (4) start doing the work of servicing the request

Despite the fact that ILS remains the best alternative to other options of managing library operations and services, Haravu (2009) identified some limitations of some ILS. The limitations are not overwhelming since present day ILS like Koha has plethora of features capable of achieving several task within the shortest possible time that is incomparable with any kind of library information management tool. It also has a large user community that enhance collaboration and resource sharing.

Koha ILS Capability

Koha system has three interfaces with varied features in each. There is system administrator's interface, administrative interface and the users' interface. The system admin interface which is the 'account' for the server management has an admin log-in where username and password can be entered. Log in to this account could be done anywhere an Internet access could be



Fig. 2: Webmin (Systems Admin's Interface)

The actions that can be initiated through this account are system maintenance, backup, defragmentation, shutdown of server if necessary, upload and download of records among others.

Staff/Administrator Interface

The staff interface has most of the functions for configuration of the system that give right to several features accessible on the user interface. It gives access to multiple staff clients at the same time and enable them work independently either as circulation, cataloguing or acquisition staff. Staff

accounts are created through the administrator's interface which gives each library staff the right to enter bibliographic records, modify, edit, copy, migrate, charge, discharge and search other libraries around the world through the zebra crossing mechanism Z39.50. The administrator's interface remains a sensitive account, the library staff were enjoined to ensure proper management of their account and data hence any erroneous data entry and or deletion affects the records on the database which are accessed by users



Fig. 3: Koha staff/administrator's interface displaying active modules

Circulation and Patrons: This feature handles the registration of patrons for easy management of the circulation records. Charging and discharging of materials are easily done through this feature. The feature has patron categories, patron attribute type, circulation and fine rules, library transfer limits and item circulation alerts among others. The system administrator has exclusive right to manage the accuracy of user's registration and patrons records.

Catalogue: the catalogue feature has MARC21 bibliographic framework; Z39.50, XML; and the ability to link locally and externally hosted online documents in different formats. This helps to create and manage bibliographic records and define the characteristics of MARC records (field and subfield definitions) as well as templates for MARC editor. It also has MARC mapping

transactional database (SQL) and the MARC bibliographic records. Note that the mapping can be defined through MARC bibliographic framework. This tool is just a shortcut to speed up linkage. However, another feature of the cataloguing module include keywords to MARC mapping which define the mapping between keywords and MARC fields, those keywords are used to find some data independently of the framework. Furthermore, the MARC bibliographic frameworks test/checks the MARC structure. If changes are made on MARC bibliographic framework, it is recommended that a test for errors be done to check for errors of the definitions.

Another feature in the catalogue module is the authority types. This feature creates and manages authority's frameworks that define the characteristics of MARC records (field and subfield definitions). The classification

classification sources (i.e., call number schemes) used by a library's collection. It also define filing rules used for sorting call numbers, while the **Record matching rules** feature manage rules which automatically matches MARC records during record imports. This feature is very necessary as it works with Z39.50.

Acquisition parameters: The feature defines currencies and exchange rates used for acquisition, annual library budgetary allocation and fund disbursements. The acquisition module helps the library to utilize their annual budget effectively. It also enhances appropriate records keeping hence it captures every vendor's detail for tracking.

Z39.50: This feature defines which server to query for MARC data in the integrated

catalogues and enhances importation of bibliographic data from a particular library that is saved on a specific ILS system, for example, at the click of Z39.50 search on the 'add MARC record' page, it quickly displays a dialog box that has several online systems including New York University Library, New York Public Library, Columbia University, Smithsonian Institution Libraries and Library of Congress. Any of these libraries could be accessed to import bibliographic information of a material for processing. This is shown on figure 4. The feature enhances quick and prompt communication amongst libraries using Koha and other systems that are complaint. Zebra crossing is more like crossing the boundary to another domain in search of information. The feature supports collaboration and synergy amongst libraries

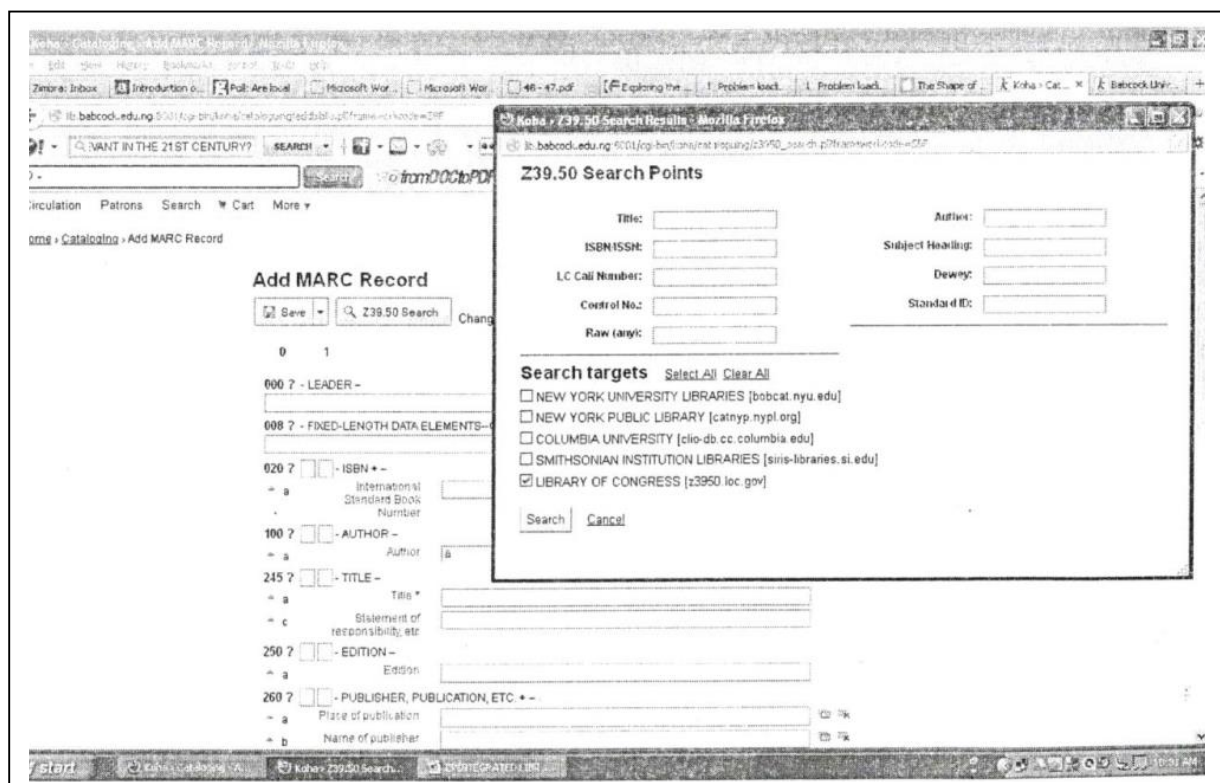


Fig. 4: Koha template for adding MARC records with Z39.50 import feature

The Admin interface has more features which include global system preference, basic parameters, patrons and circulation, cataloguing and acquisition parameters.

Global System Preference (GSP): This feature provides access to viable configuration features, settings and limiters as preferred by a library systems administrator. Whatever change that is done through any of the features and saved, immediately affects the function. This feature also provides access to the acquisition, cataloguing, serials and circulation modules. However, the enhanced features include IISN/LION preference which allow or disallow the use of different languages in the world. This means that, if Koha system is installed in Spain, the language can easily be changed to Spanish. This applies to English, French, German, among other languages of the world. Another interesting feature under the GSP is OPAC which enables the display of external links on the user's interface. This is shown on figure 3. All the external links as displayed on the user interface are uploaded through the patrons' hyperlink.

Basic Parameter (BP): The basic parameter displays the libraries, branches and groups through which the administrator defines the libraries and gives them appropriate identification. It also has item type, which defines the items, i.e. book, serials,

application of circulation rules on each item. It also assists to identify materials and to set parameter for those that are meant for loan and reserve.

An expanded discussion on the feature of the system and the advantages of installation is available on <http://onl.org.nz/koha-features>

User Interface

The user interface is the online public access catalogue (OPAC). Reitz (2004) describes OPAC imbedded on an integrated library management software (ILMS) as a database composed of bibliographic records describing the books and other materials owned by a library or library system accessible via public terminals or work stations usually concentrated near the reference desk to make it easy for a user to request the assistance of a trained reference librarian. Koha has an Internet compatible OPAC that is capable of communicating with other online resources. It is easy to send out messages to the administrator and to suggest and recommend resources to the acquisition librarian. Umahi (2011) affirms that before OPAC was widely used, there were several types of information retrieval tools such as bibliography, index, book catalogue, card catalogue and CD-ROMs. The use of OPAC which comes with an ILS brings to the fore the paradigm shift which gives ILS a stable stance to launch into

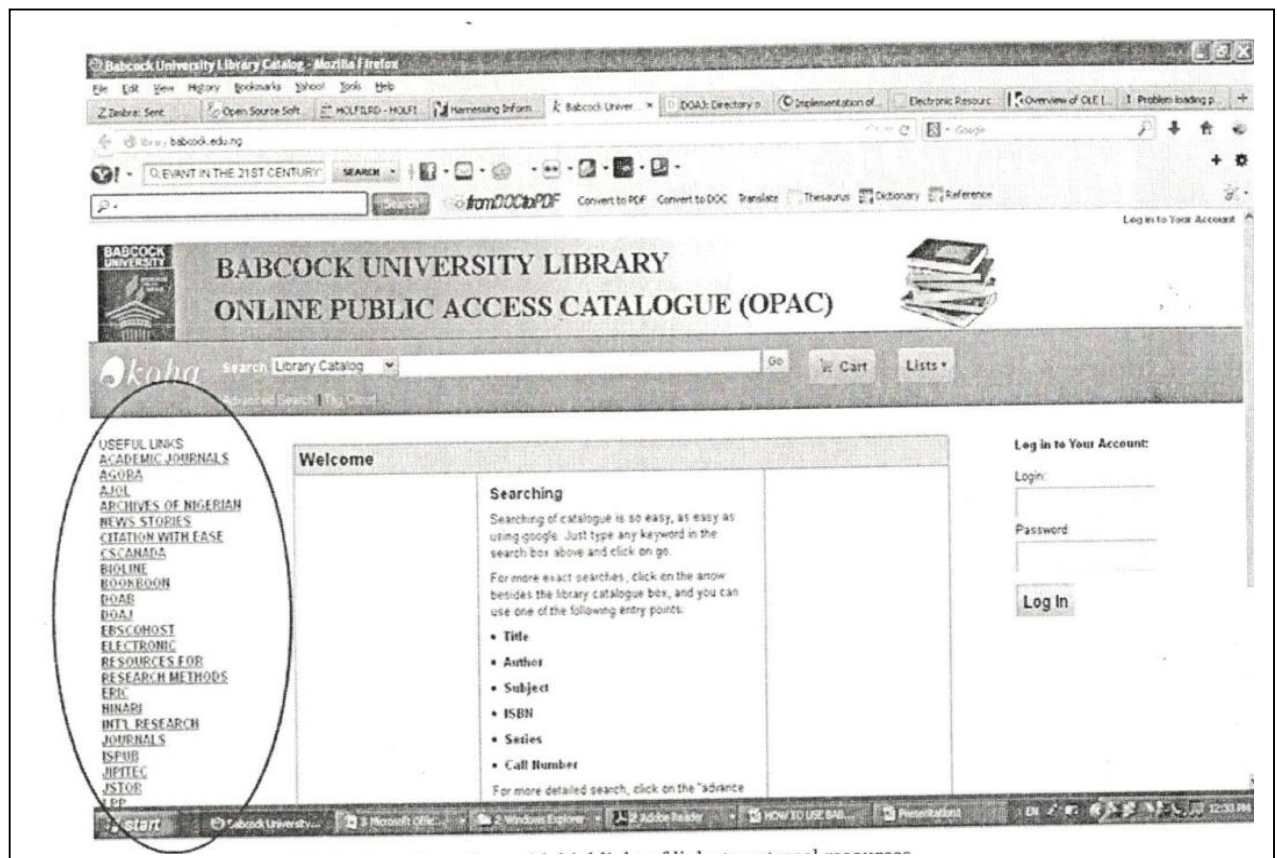


Fig. 5: Users' interface with highlight of links to external resources

Koha user interface has a searchable tab which provides details of bibliographic records available in the library collection. Babcock University library OPAC is very appealing and inviting. It guides users to make a quick search of other electronic resources that are made available on its interface. The OPAC also provides a brief detail of how to use the system and a login feature meant for registered library users. Searching the library collection to retrieve materials from the shelf is very simple. This can be done by entering a search term, for example, keyword, title, author name, ISBN, ISSN, accession number, publisher or year of publication to retrieve information.

The login provides a user with

collection in form of a welcome notice at every log in. It also has an alert system to prompt a user for availability of information earlier searched for and to notify user of overdue materials in their custody. It also enhances user personal account management and requests sending, keeping materials on hold and making suggestions. Bissels (2008) noted that the first demonstration of the CAMLIS Koha OPAC to stakeholders was greeted with much enthusiasm. This could be as a result of the captivating features of the OPAC.

Koha was published as an open source with GNU license. This implies that the license is free and it gives those who implement it full access to the source code.

customize the system/OPAC to meet the needs of the library. As a library needs changes, adapting to Koha, either by installing updates and additions was easy (Bissels, 2008). Koha user community is available via www.koha-community.org/support/koha-mailing-lists/ which also provides information on updates, current improvement and patches to correct errors and upgrade.

Library 2.0: A Viable Feature on Koha ILS

The essence of providing information to satisfy user's needs is a library's major goal and unwinding task. Library 2.0 is a viable feature that enhances user participation, collaboration and interaction through sending of comments based on their perception of the services provided by a library. Library 2.0 stresses the importance of user participation in creating and evaluating services that libraries provide both physically and virtually (Casey & Savastinuk, 2006). It gives users the opportunity of redefining their needs and customizing their page on the internet. Casey (2006) cited by Haider (2009) affirms that through the use of library 2.0, library users, should they desire, can effect changes on the software and tailor library services to best meet their own needs. This can be done electronically through the personalization of library web pages, or physically through new service options such as allowing customers to call impromptu book talks or discussion groups. Such collaborative efforts require librarians to develop a more intensive routine of soliciting customers' response and regular evaluation and update of services.

and library users. Jetty, Anbu, John, Jain, and Hopkinson (2011) confirms that librarians are the architects to design best next generation ILS by amalgamating Web 2.0 tools and the social networking aspects to the traditional catalogues which offer interactive options to the patrons. The new generations of ILS integrates library 2.0 features to achieve the same purpose of web 2.0. Such features include social networking, sites, blogging, wikis, video sharing, hosted services, web applications, mashups, combination, visualization, and aggregation of data, folksonomies, practice and method of collaboratively creating and managing tags to annotate and categorize contents.

RESOURCE SEARCH

To search for library resources on Koha is as easy as searching other online search engines, for example, Google, Ask.com, among others. This is because, Koha user interface has a searchable tab where user can search for information in the library using keyword, title, author, call number, accession number, publisher, year of publication, ISBN and ISSN. Once the search term is defined and entered, the system generates an array of materials relating to the term used. Access therefore becomes easy by clicking at the hyperlink of the material(s) needed and this immediately displays the full bibliographic details, the location of the material, on the shelf, the status and number of copies available in the library. The searcher is therefore at liberty to click the available resources and thereafter move to the shelf to

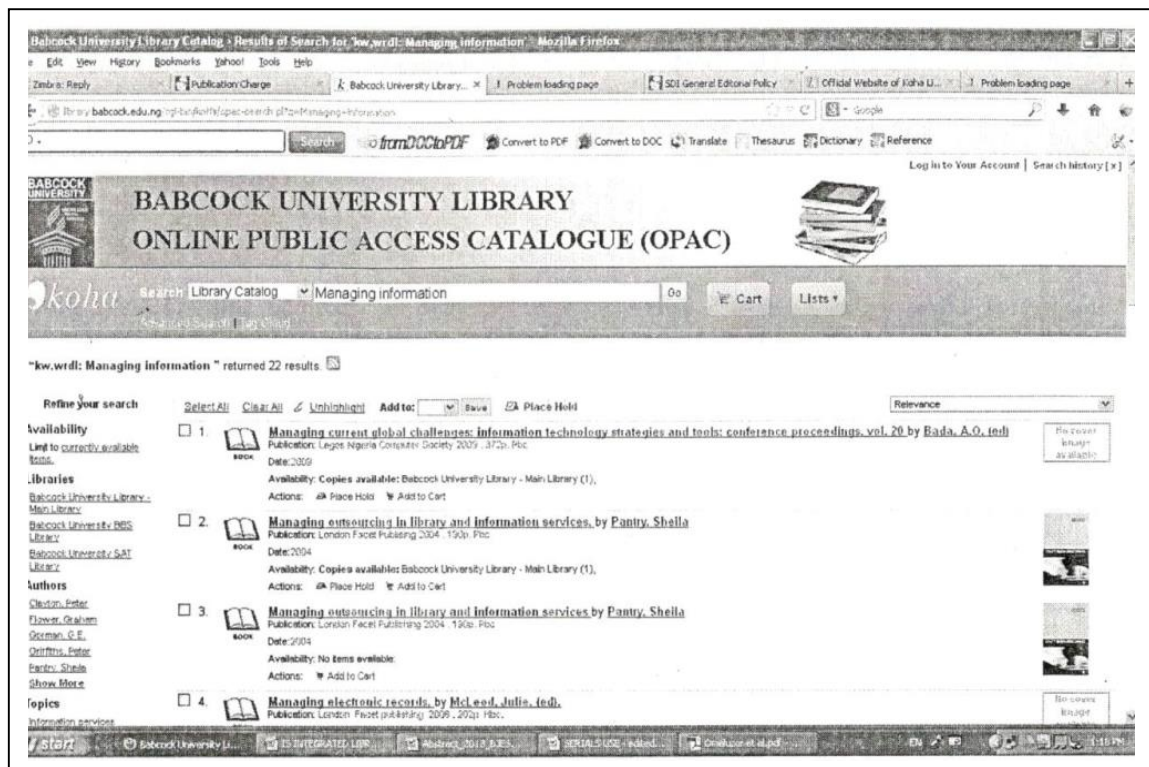


Fig. 6: Search results on Koha user interface

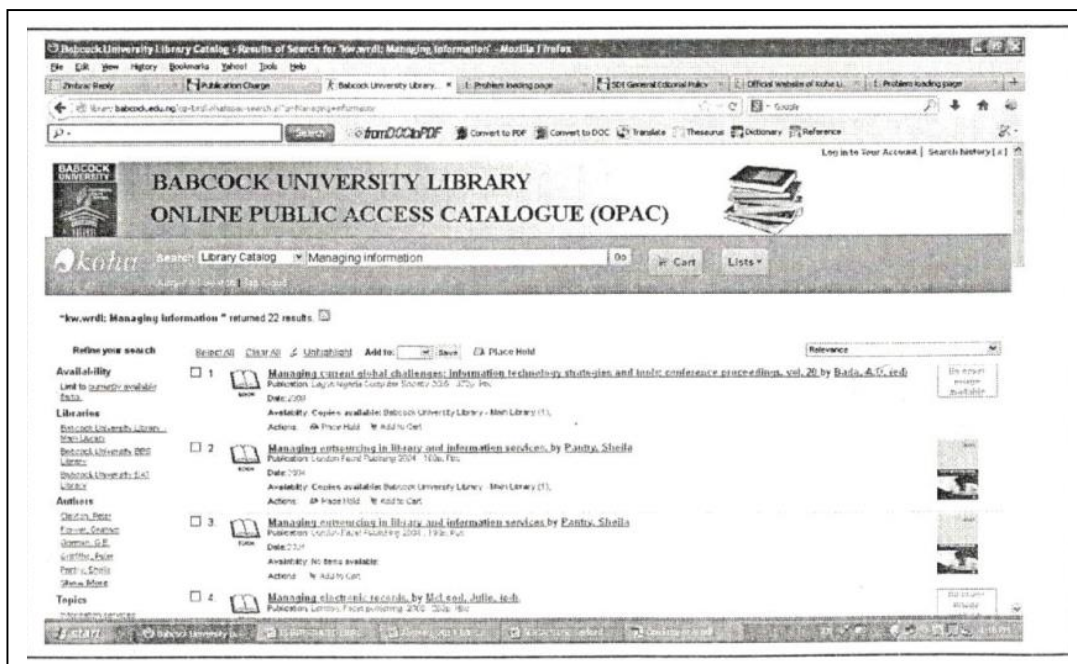


Fig. 7: Bibliographic details of a book and links to other online libraries on Koha user interface

System Response Time

One of the capabilities of Koha is handling multiple and varied requests without delay as shown on figure 5. The software is enhanced to provide access to several search and requests to library users. At a click of the mouse, relevant information requested is provided within the shortest possible time. The speed of display is in second. However, if display of information from ILS become slow than expected Linkcat (2013) based on their experiences, proposed it could be affected by a variety of causes. Sometimes, it could be hardware issues, and sometimes there may be a broader issue. They noted that problem that originates at LibLime and the Amazon hosting service may cause response time problems for all computers and all libraries connected to it. Sometimes these problems start small and build up over the course of a few hours. Should Koha user experience such challenge, the following information should be documented,

- Date and time of the day
- PC# (or note that it affected all staff and/or patron PCs)
- What you were doing (e.g. checking in, searching for an item, be as specific as possible)
- How long pages are taking to load*
- How long the problem lasted (e.g. 5 minutes, 15 minutes)
- Any action you took (e.g. logged out of Koha, cleared cache, etc.)

Since Koha has a robust feedback mechanism, large community of users, a team of computer analyst and librarians, it is important to emphasize that once an issue is identified, the developers did not relent to provide solution in order to fix it. This was the case with the slow response time and other issues experienced by some libraries that uses Koha. These issues were posted to the community forum and Koha technical team within the period of receiving the requests pushed out 185 patches to fix the

patches released by the ‘release manager’ also include the course reserve module which allows academic libraries to designate items that are held on reserve for students of specified courses. When an item is placed on course reserve, it is associated with one or more courses and can have various attributes, including location and item type, temporarily changed. This allows an item to have a different (and usually shorter) loan period than it normally would. When the item is taken off reserve at the end of the academic term, its normal attributes are restored.

User Training: A Way of Achieving Best Result from ILS

User education cannot be overemphasized to ensure effective utilization of library resources and services. Omeluzor, Adara, Madukoma, Bamidele and Umahi (2012) strongly believes that to equip a library user is to provide such user with the training on how to use available library tools in order to access resources. Borgman (1996) also opines that searching requires conceptual knowledge of the information retrieval process. It is therefore believed that a searcher should have a conceptual knowledge of how to search the catalogue. The search must be either through author, subject, title, keyword among others. It is widely believed that keyword search of subject headings provides a powerful mechanism to locate all headings containing a given word and all records containing a given word in the subject fields (Borgman 1996).

A searcher must be poised by something in his/her mind before approaching the search tool. To further make search more impressive, Borgman (1996) opines that online catalogues can be made easier through improved training and documentation that is based on information-seeking behaviour. This is achievable since librarians are improving and redesigning ILS for effective information retrieval. Training must be

The Future of ILS

'I don't know the future of the ILS - but that won't stop me from making predictions. I predict: If we continue with the status quo, it has no future. I predict: If we free the ILS from its current constraints it will be free to evolve and, perhaps, survive.'

This was the prediction of Nelson (n.d.) as ILS continues to evolve. He opines that for ILS to survive it must open up, join in the flow, participate and evolve. Nelson's prediction was in conformity with Koha since it is open source software with a large community of users contributing to its development and future advancement.

It is obvious that current ILS presently used in most libraries have been identified to be efficient. This has made most stakeholders to identify with ILS projects. One of such project is the Open Library Environment (OLE) project, an initiative of the Duke University in the USA which begun in 2008 with funding from the Andrew Mellon Foundation and has involved a multinational group of libraries in the USA, Canada, Australia and UK with the objective of developing the design for an Open Library Environment (OLE), an alternative to the current model of an Integrated Library System (Haravu, 2009). Kuali OLE is the first system designed by and for academic and research libraries for managing and delivering intellectual information. Their intention was to

- Build, owned, governed by the academic and research library community
- Supports the wide range of resources and formats of scholarly information
- Interoperates and integrates with other enterprise and network-based systems
- Supports federation across projects, partners, consortia, and institutions
- Provides workflow design & management capabilities

- Provides information management capabilities to non-library efforts
- Again, Haravu highlighted that the overriding goal was to
- Produce a design document to inform open source library system development efforts,
- To guide future library system implementations, and
- To influence current Integrated Library System vendor products.

Should these intentions and goals be achieved, it means that current ILS would consistently be gaining support from user community and stakeholders.

Users have also made positive comments and published their experiences about ILSs. (Bissels, 2008; Omeluzor, et al. 2012). Johnson (2010) remarked that Koha offer students an excellent next generation learning tool; an enhanced solution for locating information from whatever source with all the benefits of new social media technology and integration with existing systems. The solution provides an excellent support infrastructure, full standards compliance and importantly great value for money. Most LMS are 'closed' and controlled by vendor. Inability by libraries to access source code of closed systems has led to abandonment given credence to ILS as the best choice. The peculiarity of the apparent drawbacks on closed systems may lead to a conclusion that ILS is not capable of meeting the needs of libraries. But this is not true, as Koha has set the pace in ILS development used by many notable institutions across the world (http://wiki.koha-community.org/wiki/Koha_Users_Worldwide). The issues raised here should be a starting point for innovative and creative ideas into exploring ways and means of improving future ILS. Libraries intending to implement ILS should, be able to make wise choice than

Conclusion

The paradigm shift experienced through the development of ILS in this era which provides wonderful opportunities for libraries globally to provide quality services must be properly harnessed, improved and sustained. It is no more news that ICT provides great and better deal for libraries of today to utilize and support their operations and services. Koha ILS is fully integrated with enhanced modules for varied routine activities that are practicable at any library. Koha ILS is also internet compatible which provides opportunity for collaboration, knowledge and resource sharing to boost library services. It is obvious that an ILS that utilizes the computing powers of ICT will bring innovation and creativity into library operations and services of today.

Recommendation

Study should be carried out to improve ILS in order to accept new features like institutional repository and digital contents of a library to avoid implementing parallel system by an institution.

Note:

1. System and software are used interchangeably in most part of this work.

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