

Assessing The Use of Koha Software for Integrated Library Management System in University Libraries in Benue State, Nigeria

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Article History	Abstract
Original Research Article	<p><i>This study assessed the use of Koha software for integrated library management system in university libraries in Benue State, Nigeria. Library as the heart of any institution is established to provide information resources and services to support academic activities of their patrons, such as students, teachers and other stakeholder in education development. The main purpose of this study is to assess the use of Koha software for integrated library management system in university libraries in Benue State, Nigeria. The design for this study is a descriptive survey research design. The population for this study comprises 210 library staff made up of professional librarians and non-professionals in the two university libraries under study, namely; Benue State University Library, Makurdi; Francis Suleman Idachaba Library of the Federal University of Agriculture Makurdi. The instruments for data collection for this study are: a structured questionnaire titled “Koha Use and Integrated Library Management System Questionnaire” (KUILMSQ) and a checklist. The questionnaire and checklist were designed for this study by the researcher in line with the research questions guiding the study. The checklist has a total of 13 items and seeks to collect data on the available ICT facilities for effective Koha use. The Cronbach Alpha method yielded a reliability coefficient of 0.89. Cronbach Alpha. The study revealed that the reasons for the adoption of Koha software include low cost of purchase (100%), user-friendliness (100%), flexibility (100%), re-usability (97.6%), adaptability (98.6%), low cost of maintenance (100%), efficiency (100%), unified management (100%), reliability (100%), stability (100%), support and support model (94.8%), ability to manage privileges and permissions (95.7%), availability of search options (95.2%), and web-based OPAC functions (96.7%). The ICT facilities available for effective Koha use include printers (100%), scanners (100%), telephone (100%), internet (100%), digital camera (100%), multimedia (100%), barcode reader (100%), bandwidth (100%), projector (100%), public address system (100%), photocopying machine (100%), Uninterruptible Power Supply (UPS) (100%), and computer systems (100%). The study concluded that Koha software is effectively used in universities in Benue State for integrated library management system, but faces challenges such as inadequate funding, lack of consortium, inadequate power supply, and inadequate managerial support.</i></p> <p>Keywords: Koha Software, Integrated Library Management System, University Libraries</p>
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<p>Copyright © 2025 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p> <p>Citation: Gurgur Queen Winifred, Janet Member Kile. (2025). Assessing The Use of Koha Software for Integrated Library Management System in University Libraries in Benue State, Nigeria. UKR Journal of Multidisciplinary Studies (UKRJMS), Volume 1(10), 23-32.</p>	

Introduction

The library is the heart of any institution. It is there to give information resources and services to help students, professors, and other people who are involved in education development with their academic work. Libraries are like lighthouses for sharing information. They are a crucial part of any school and a place where students, researchers, and

teachers may learn about a lot of different things. Library operations in different parts of the world are not the same as they used to be since technology is getting better. Since the start of the 21st century, libraries in developing countries like Nigeria have been working to change from being places where people do things by hand to places

where some or all of their work is done with Information and Information and Communication Technology (ICT) applications. Because of how quickly knowledge and Information and Communication Technology (ICT) is growing in today's world, academic libraries are always making new knowledge available to everyone, no matter where they are or when they need it.

The quest for excellence in every part of the educational system makes it necessary for schools all over the world to do their jobs. To provide quick and good service to library users, librarians need to adapt to the changing world by using Information and Communication Technology and the latest software to handle daily library tasks (Omeluzor, Adara, Ezinwayi, Bamidele & Umahi (2012). Information and Communication Technology (ICT) has caused a lot of problems for all parts of the university system, and the library is no exception. So, automating a library is a unique choice that makes it easier for library staff to do their jobs quickly, since every customer wants quick answers to their questions and easy access to information. Integrated Library System (ILS) has made this possible. An integrated library system (ILS), often called a library management system (LMS), is an enterprise resource planning system for a library that keeps track of materials possessed, orders made, bills paid, and patrons who have borrowed. It is a complicated program/database that combines many library functions into one (ideally) seamless system (Chow & Bucknail, 2012). The authors think that ILSs are the central nervous system of library automation. They usually have several separate but related modules, such as Acquisitions (for ordering materials), Cataloguing (for creating and managing MARC records), the Online Public Access Catalogue (OPAC) (which users use to search the catalog), Circulation, and Reserves. The systems are very complicated and combine many different records into one transaction. An ILS usually has a relational database, software that lets people utilize that database, and two graphical user interfaces (one for patrons and one for staff). (Wikipedia, 2012). Most integrated library systems break up software functions into independent programs called modules, and each module works with a single interface. Muller (2011) said that "integrated library systems (ILS) are software programs that can do many things and can be changed to fit the needs of libraries." When libraries choose ILS software, they look at more than just how well it works and how quickly it can be set up. They also look at how flexible it is, so it can easily meet the needs of their users in the future.

There is no longer any doubt about how important integrated systems are for library tasks like cataloging, circulation, acquisition, and serials management. Libraries all over the world have realized that they need to move from

manual processes to integrated systems and networked operations. Before computers, library tasks were done by hand and not in groups. Selectors used ordering slips to order materials, cataloguers used the card catalog system to manually catalog items and index them (in which all bibliographic data was kept on a single index card), and users signed books out by writing their name on cue cards that were kept at the circulation desk. As computers become more common, academic libraries in Nigeria are moving away from being separate and toward being part of larger systems and networks. Academic libraries in Nigeria are doing their best to keep up with libraries in the industrialized countries. An ILS takes care of a lot of library activities that would otherwise be boring, time-consuming, and not very useful. Different academic libraries in Nigeria use different kinds of integrated library system software. Some of these are TINLIB software, Evergreen, and Koha. Uzomba, Oyebola, and Izuchukwu (2015) asserted that the majority of these academic libraries were unable to persist with the utilization of TINLIB due to various technological challenges, maintenance issues, inadequate revision policies, and the exorbitant expenses associated with its processing and upkeep. Breeding (2011) said that because of these problems, open-source ILS software like Koha and Evergreen is becoming more popular, especially in small to mid-sized libraries. Koha is widely utilized in Nigerian libraries right now. Only Benue State University Library in Benue State has automated Koha for managing an online library.

As libraries automate more and more, there are more and more reports of libraries using open-source integrated systems like Koha. Many libraries around the world, even in impoverished countries like Nigeria, use and accept Koha software. In addition to being cheap or free to run, it has also been shown to be more reliable and useful. Koha software is all about working together and sharing. Wheeler (2007) said this: "Open-source software lets users run the program for any reason, study and change it, and share copies of the original or changed program without having to pay royalties to the developers who made it." It gives you more freedom and flexibility than software that comes with license restrictions. The Koha software developer and the people who use it both believe in sharing and open standards. Ukachi (2012) emphasized that "the primary reason to select the Koha application is the liberty it provides to modify the source code according to specific needs and the flexibility it offers for program adaptation to meet objectives." Benue State University has started using Koha in its university libraries, while the Francis Suleimanu Idachaba Library of the University of Agriculture Makurdi is working to make sure that it is fully implemented.

Koha software could be called reliable since it doesn't have any bugs, which are problems that can cause it to not work right, lose data, break down suddenly, or not meet specifications or stated standards. This doesn't mean that people never have difficulties with Koha, but problems are usually fixed quickly, and having access to the source code makes this process even easier. Open-source software is often thought to be the ideal choice for libraries, however research has revealed that there are several problems with using and adopting it. Nwachukwu, Asiegbu, and Ogwu (2014) found that the koha packages weren't being used effectively because the setting wasn't right, there were virus attacks, the packages weren't compatible, the power supply was unstable, the library personnel wasn't trained, and there wasn't enough money. Iroaganachi, Iwu, and Esse (2015) say that many university libraries in Nigeria could use Koha, but there are some things that are getting in the way of this, such as not enough money, not enough skilled librarians, power outages, not enough web-accessible OPACs, libraries not growing at the same rate, and library automation not moving quickly enough. These concerns could be very bad for libraries who want to use Koha software and associated processes, like the library at Benue State University. The study also aims to identify obstacles that hinder the implementation of Koha in University Libraries within Benue State.

The libraries are the university's heart, and they are the educational lifeline for every committed user. The Libraries have been working very hard lately to change from being manually driven to being modern driven, where operations rely on Information and Communication Technology applications in whole or in part. These efforts led to the use of D-space and Koha. D-space is an institutional repository for storing local information, while Koha is library administration software that makes library operations better. Since the implementation of this software, specifically Koha, which is the focus of this study, no evaluation of its utilization has been conducted to determine its efficacy in library management. This study aimed to evaluate the utilization of Koha software for an integrated library management system in university libraries within Benue State, Nigeria.

Statement of the Problem

It's hardly unexpected that these days, talking about information and communication technologies is a big part of what libraries do. Because information technology has changed so much, an integrated library system like Koha has become necessary. In today's environment, when people are very connected, the library's capacity to provide useful services depends on how well the integrated library system works. Libraries all across the world are quickly adopting Koha products. Koha software has improved library

management and services in numerous ways, making librarians and libraries more efficient and effective. Libraries that want to better serve their users should definitely utilize this Koha library software because it is important and works well. It has been the most dependable open-source option for libraries.

The study, however, noticed that university library workers in Benue State don't seem to be using it to its full potential to order library books, send overdue notifications and other notices by email or text, and print barcodes as intended. The library staff appears to be spending more time on the internet and talking to friends, family, and coworkers during work hours than using the Koha program to its full potential. With young librarians joining the university library system, this problem could get worse because they grew up and played in the "Internet Age." If this finding is accurate concerning the utilization of Koha in University Libraries in Benue State, the goals of its implementation as an integrated library management system may be compromised. In light of this context, the researcher aimed to evaluate the utilization of Koha software for integrated library management systems at university libraries in Benue State, Nigeria, to determine its efficacy in library management.

Purpose of the Study

The main purpose of this study is to assess the use of Koha software for integrated library management system in university libraries in Benue State, Nigeria. Specifically, the study sought to achieve the following objectives:

1. Ascertain the reasons for the adoption of Koha software for integrated library management system in University Libraries in Benue State, Nigeria
2. Ascertain the ICT facilities available for effective Koha use for integrated library management system in university libraries in Benue State

Research Questions

The following research questions were raised to guide the study

1. What are the reasons for the adoption of Koha software for integrated library management system in university libraries in Benue State
2. What are the ICT facilities available for effective Koha use for integrated library management system in university libraries in Benue State?

Literature Review

University libraries are libraries that universities set up to help their academic programs. The purpose of a university library is to help students and researchers of all levels, thus librarians need to be ready to get and make available the databases that the university community needs for teaching

and research (Urhiewhu, Okeke, & Nwafor, 2015). Yusuf and Iwu (2010) characterized a university library as the nerve center or hub of scholarship, whereas Ajibero in Momodu (2015) regarded it as the heart of the university, utilizing its human and material resources to facilitate the institution's teaching, learning, and research objectives. In Nkamnebe, Udom, and Nkamnebe (2014), Okunu, Akalumhe, and Monu said that the university library is the "heart and blood" of the university. This means that a university can't work without a library that has all the books and other materials that students, teachers, and researchers require. The main purpose of the university library is to help the university reach its goals and objectives by offering information resources and services that meet the needs of everyone at the university. University libraries not only offer essential information resources and reading materials, but they also facilitate other activities, including loan services, interlibrary lending services, current awareness services, and selective diffusion of information, among others.

Adewale, Obadare, Akunniyi, and Iweha (2006) expressed a similar perspective, emphasizing the significance of the university library in fulfilling the institution's objectives, asserting that the library is the core of any academic establishment and its goals are aligned with those of the institution. They also said that if the heart is weak and not fully formed, the body can't do its job properly. In agreement with this statement, Campbell in Abubakar and Kacholom (2017) said that university libraries are complicated places that serve several purposes. They offer more than just books; they also offer services that help with research, like bibliographies, information literacy, and ICTs, to name a few.

The primary mission of a university library is to further the tripartite goals of education—teaching, learning, and research—by offering sufficient and pertinent information resources and services in both print and non-print formats (Oriogu, Chukwuemeka, & Oriogu-Ogbuiyi, 2018). The library is a place where you may get resources. It is an important aspect of the education system, and its main job is to help people (Oriogu, 2015). Ogbuiyi (2014) says that some of the goals of university libraries are:

- a) To provide and make available adequate information resources to members of the academic community;
- b) To provide instruction to students (both new and old) in certain areas of knowledge;
- c) To conduct research and extend the frontiers of knowledge;
- d) To collect, organize, preserve and disseminate the research findings of academics to the global world.

Concept of Integrated Library System

An integrated library system (ILS), often called a library management system (LMS), is a type of enterprise resource planning system that libraries use to keep track of things like goods they own, orders they make, bills they pay, and clients who have borrowed items. Oyekale (2018) says that Library Integrated Systems (ILS) are programs that help libraries run their daily operations and processes. A relational database, software to interact with that database, and two graphical user interfaces (one for patrons and one for staff) are all parts of an ILS.

The National institutions Commission, as mentioned in Nkamnebe et al. (2014), asserts that a functional library is essential to the academic endeavors of institutions. interface. According to Muller (2011), "integrated library systems (ILS) are multifunction, adaptable software applications that let libraries manage, catalog, and circulate their materials to patrons." When libraries choose ILS software, they need to think about more than just how well it works and how fast it is. They also need to think about how flexible it is and how easily it can change to meet the needs of their users in the future. In general, ILS breaks down software functions into independent programs called modules, all of which work together through a single interface. The modules are purchases, cataloging, circulation, serials, and the OPAC (Oyelake, 2018). An ILS is supposed to make a library more productive and efficient by automating tasks that would have been done by hand (Mazonde, 2017). The New World Encyclopedia (2018) listed examples of ILS as TINLIB, GLAS, X-LIB, VIRTUA, ALICE for Windows, VIRTUA, KOHA, X-LIB, SLAM, DSpace, VTLS, GLAS, E-Lib, CD-ISIS, Atrium, OPALS, LIBERO, LIBSYS, All My Books, Lucidea, Accessit Library, Handy Library Manager, Insignia Library System, MODERNLIB, Auto Librarian, Genesis G4, Soutron, Readerware, LIBRARIAN, Aleph, Aura Online, Autolyb, Bibliotheca, Deeksha, Easylib, Evergreen ILS, FIRST LMS, FlashScan-MAX KLAS, Lexwin, Lib-Portal, LibAnswers, Liberty, LibGuru, LIBMAN, Library Solution, Library Vision Library.Solution, LibraryPro, LiBRARYSOFT, LIBSOFT, M2L, MindLibrary, OpenText Library Management, Reademption Library EcoSystem, ROVAN LMS, Schookee, and SLIM21.

Concept of Koha Software

The word "Koha" stems from a Māori word that means "gift" or "donation." Koha is an ILS that runs on the web and uses a SQL database (MySQL is preferred) as its backend. It stores data in MARC format and can be accessed via Z39.50 (Wikipedia, 2012). A collection of libraries in rural New Zealand paid for the development of Koha, which started in 1999. They found that proprietary software was too expensive and didn't provide all the functionality they needed (Sobalaje, Ajala & Salami, 2018).

Koha is made to work with as few hardware resources as possible. It works with the Apache Web server and the Linux operating system. It leverages the popular MySQL open-source database management system and is written in Perl. You may also install the Koha ILS on Windows, however you need to add some more modules. It is easy to move data from one ILS to Koha (<http://www.librarytechnology.org/libwebcats/>).

Wikipedia (2012) and Projektlink (2010) say that "Koha is the first open-source integrated library software (ILS) in use worldwide by public, school, and special libraries. Its development was guided by a growing community of libraries and users working together to reach their technological goal." Koha is the best open-source system for automating libraries. Libraries all across the world utilize it, and its development is guided by a growing group of libraries that work together to reach their technology goals. You can change and customize the Koha user interface, and it has been translated into many languages. It offers most of the characteristics that an ILS should have, such as an easy-to-use interface for librarians and patrons, a union catalog, customisable search, circulation, and borrower management, a serials system for periodicals or newspapers, and more (Wikipedia, 2012). Koha has been used by thousands of libraries all over the world since it was first released. Each library has added new features and functions, making the software more powerful. Omeluzor et al. (2012) said that "Koha has been used by thousands of libraries around the world since it was first released, and each library has added features and functions, making the software more powerful."

Koha is "open source," which means that anybody can use it for free and change it to make it function better for them. Boss (2008) says that open source software includes the original source code used to generate it. It also includes the right to redistribute, so there may be both open source and proprietary products that use open source software. On the other hand, a closed, proprietary system limits the library's options for getting to the underlying data (Breeding, 2009). Koha has a lot of features that make it easy for both staff and clients to use. Müller (2012) said that Koha ILS was the most complete FOSS ILS since it could do a lot of things, such as route magazines, keep track of inventory, create notices for consumers, and track orders. You may find a list of some of these features on the OSSlabs website at <http://www.osslabs.biz/koha/features>. Koha is a good choice for the University Library because it can handle a large collection, integrate basic library tasks, is easy to set up, responds quickly, has a menu-driven interface, can be used with other systems and software, and has a zebra crossing, among other things (Umeluzor, 2012).

Theoretical Framework

The theoretical framework of this study is based on Library 2.0 theory by Jack Maness 2006.

Library 2.0 Theory by Jack Maness 2006

Jack Maness put this idea forward in 2006. The proponent's theory talks about "the use of interactive, collaborative, and multi-media web-based technologies in web-based library services and collections." It is a collection of new technologies and services that work with the library to make it easier for people to access its resources and services, let them take part, and keep librarians up to date in their area. Library 2.0 is a theory of library service that uses new Information and Communication Technologies to make a dynamic physical and/or virtual library platform that users and librarians define and control. This platform makes it easier for users to have a better library experience, anytime and anywhere.

Library 2.0 understands that people don't look for and use information alone; they do it as a group. Library 2.0 is a way of thinking about services that helps libraries get new customers while also admitting that their current services are not good enough and are too rigid. This is called discovering new ways to get patrons interested, such as enabling them leave comments, add tags, review library materials, and take part in other library activities that are interactive and collaborative.

The library's collection will alter with Library 2.0. It will be more interactive and easier to get to. The library's services will alter, and instead of controlling access to information, they will focus more on helping people share and learn about it. This study proposes four conceptual foundations for Library 2.0: it is user-centric, a multimedia experience, socially enriching, and collectively inventive. It also supports a clear definition of the word:

"The application of interactive, collaborative, and multi-media web-based technologies to web-based library services and collections.

The theory enables the access to information across society, the sharing of that information, and the utilization of it for the progress of the society. Library 2.0 demands libraries focus less on secured inventory systems and more on collaborative discovery systems. Library 2.0 is a shift from recent thinking describing the changing web as "Web 2.0" and has substantial implications for libraries. Maness (2006) posited that Library 2.0 will revolutionize the librarianship profession; rather than creating systems and services for patrons, librarians will enable users to create them for themselves. Library 2.0 theory could be understood to have these four essential elements:

- It is user-centered. Users participate in the creation of the content and services they view within the

library's web-presence and OPAC among others. The consumption and creation of content is dynamic, and thus the roles of librarian and user are not always clear.

- It provides a multi-media experience. Both the collections and services of Library 2.0 contain video and audio components. While this is not often cited as a function of Library 2.0, it is here suggested that it should be.
- It is socially rich. The library's web-presence includes users' presences. There are both synchronous (example IM) and asynchronous (example wikis) ways for users to communicate with one another and with librarians.
- It is communally innovative. This is perhaps the single most important aspect of Library

2.0. It rests on the foundation of libraries as a community service, but understands that as communities change, libraries must not only change with them, they must allow users to hange the library. It seeks to continually change its services, to find new ways to allow communities, not just individuals to seek, find, and utilize information.

Library 2.0 is a user-centered virtual community. It is a socially rich, often egalitarian electronic space. While Librarian 2.0 might act as a facilitator and provide support, he or she is not necessarily primarily responsible for the creation of the content. Users interact with and create resources with one another and with librarians. In some ways, it is a virtual reality for libraries, a Web manifestation of the library as place. A library's presence on the Web in Library 2.0 includes the presence of that library's constituency and utilizes the same applications and technologies as its community. The author applied the theory and definition to the practice of librarianship, specifically addressing how Web 2.0 technologies such as synchronous messaging and streaming media, blogs, wikis, social networks, tagging, RSS feeds, and mash-ups might intimate changes in how libraries provide access to their collections and user support for their access.

Research Methodology

The design for this study is a descriptive survey research design. The population for this study comprises 210 library staff made up of professional librarians and non-professionals in the two university libraries under study,

namely; Benue State University Library, Makurdi; Francis Suleman Idachaba Library of the Federal University of Agriculture Makurdi. The instruments for data collection for this study are: a structured questionnaire titled “Koha Use and Integrated Library Management System Questionnaire” (KUILMSQ) and a checklist. The questionnaire and checklist were designed for this study by the researcher in line with the research questions guiding the study. The checklist has a total of 13 items and seeks to collect data on the available ICT facilities for effective Koha use. The Cronbach Alpha method yielded a reliability coefficient of 0.89. Cronbach Alpha.

Data Analysis Techniques

Data collected was analyzed using descriptive statistics of Frequency Counts, Percentages, Mean and Standard Deviation to answer the research questions. The instrument which takes the form of a continuum of Strongly Agree SA, Agree A, Disagree D, and Strongly Disagree SA, was scored as; SA=4, A=3, D=2 and SD=1. The Mean benchmark is calculated thus;

$$\frac{4+3+2+1}{4}$$

$$4$$

$$= 2.50$$

Therefore, any item with a Mean value of 2.50 and above was considered ‘Agreed’ while those below 2.50 were considered “Disagreed”

For the analysis of research questions 1 where checklist was used, 1 was denoted ‘Available’ while 0 was denoted ‘Not Available’ (1 = Available; 0 = Not Available).

Result

Research Question 1

What are the reasons for the adoption of Koha software for integrated library management system in university libraries in Benue State?

To answer this research question, data on the reasons for the adoption of Koha software for integrated library management system in university libraries in Benue State were collected and analyzed as presented on Table 1

Table 1: Frequency Counts and Percentage Analysis of the reasons for the adoption of Koha software for integrated library management system

Table 1: Frequency Counts and Percentage Analysis of the reasons for the adoption of Koha software for integrated library management system

S/No	ITEMS	Frequency		Percentage (%)		Decision
		YES	NO	YES	NO	
1	Low Cost of Purchase	210	00	100	0.0	Reason for use

2	User-Friendliness	210	00	100	0.0	Reason for use
3	Flexibility	210	00	100	0.0	Reason for use
4	Re-usability	205	05	97.6	2.4	Reason for use
5	Adaptability	207	03	98.6	1.4	Reason for use
6	Low cost of maintenance	210	00	100	0.0	Reason for use
7	Efficiency	210	00	100	0.0	Reason for use
8	Unified management	210	00	100	0.0	Reason for use
9	Reliability	210	00	100	0.0	Reason for use
10	Stability	210	00	100	0.0	Reason for use
11	Support and support model	199	11	94.8	5.2	Reason for use
12	Ability to manage privileges and permissions	201	09	95.7	4.3	Reason for use
13	Availability of search Options	200	10	95.2	4.8	Reason for use
14	Web based OPAC functions	203	07	96.7	3.3	Reason for use

Table 1 showed the reasons for the adoption of Koha software for integrated library management system in university libraries in Benue State. As revealed on the table, all the items (1-14) with percentage values of required above 50% and are considered the reasons for the adoption of Koha software for integrated library management system in university libraries in Benue State.

Research Question 2

What are the ICT facilities available for effective Koha use for integrated library management system in university libraries in Benue State?

To answer this research question, data on the ICT facilities available for effective Koha use for integrated library management system in university libraries in Benue State were collected and analyzed as presented on Table 2

Table 2: Analysis of ICT facilities available for effective koha use for integrated library management system

S/N	ICT facilities	INSTITUTIONS		REMARK
		BSU	UAM	
1	Printers	1	1	Available
2	Scanners	1	1	Available
3	Telephone	1	1	Available
4	Internet	1	1	Available
5	Digital Camera	1	1	Available
6	Multimedia	1	1	Available
7	Barcode Reader	1	1	Available

8	Bandwidth	1	1	Available
9	Projector	1	1	Available
10	Public address system (Speakers, Microphone, Amplifier)	1	1	Available
11	Photocopying machine	1	1	Available
12	Uninterruptible Power Supply (UPS)	1	1	Available
13	Computer systems	1	1	Available

Data presented on table 2 showed the ICT facilities available for effective Koha use for integrated library management system in university libraries in Benue State. As presented on the table, all the items (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12) are considered available for effective Koha use for integrated library management system in university libraries in Benue State.

Summary of Major Findings

The following findings emanated from the study:

1. The reasons for the adoption of Koha software for integrated library management system in university libraries in Benue State include: low cost of purchase, user-friendliness, flexibility, re-usability, adaptability, low cost of maintenance, efficiency, unified management, reliability, stability, support and support model, ability to manage privileges and permissions, availability of search options and web based OPAC functions.
2. The ICT facilities available for effective Koha use for integrated library management system in university libraries in Benue State include: printers, scanners, telephone, internet, digital camera, multimedia, barcode reader, bandwidth, projector, public address system (Speakers, Microphone, Amplifier), photocopying machine, Uninterruptible Power Supply (UPS) and computer systems.

Discussion of Findings

Based on the findings derived from the study, the following were discussed.

The first finding of the study revealed the reasons for the adoption of Koha software for integrated library management system in university libraries in Benue State to include: low cost of purchase, user-friendliness, flexibility, re-usability, adaptability, low cost of maintenance, efficiency, unified management, reliability, stability, support and support model, ability to manage privileges and permissions, availability of search options and web based OPAC functions. This finding corroborate with that of Oyekale (2018) whose study on Integrated

Library Systems (ILS) in Use in University Libraries in Osun State, Nigeria revealed the reasons for which libraries adopted a particular integrated library system to include: comprehensive functionality; library standards compliant; popularity among libraries in Nigeria; technical feasibility and support; web-based interfaces; freedom to change support company or its vendor; being an open source and upgradability. This finding also corroborate with that of Uzomba, Oyebola and Izuchukwu (2015) who investigated the use and Application of Open Source Integrated Library System in Academic Libraries in Nigeria: Koha Example and revealed the justification for the adoption of Koha software to include: user-friendliness flexibility, re-usability, adaptability, robustness, low cost of purchase, low cost of maintenance, efficiency, unified management, stability, reliability, support and support model, ability to manage privileges, availability of search options and web based OPAC. This finding as observed implied that Koha software requires little or no cost to operate and it has proved to be more reliable and effective and thus has found wide adoption and acceptability in many libraries of the world, including developing country like Nigeria and particularly, universities libraries in Benue State.

The second finding of the study revealed that the ICT facilities available for effective Koha use for integrated library management system in university libraries in Benue State include: printers, scanners, telephone, internet, digital camera, multimedia, barcode reader, bandwidth, projector, public address system (Speakers, Microphone, Amplifier), photocopying machine, Uninterruptible Power Supply (UPS) and computer systems. This finding agrees with that of Uzomba, Oyebola and Izuchukwu (2015) and Sobalaje, Ajala and Salami (2018) who revealed the facilities for managing Koha software to include computer systems, computer printers, scanning machine, telephone, internet, digital camera, multimedia, bar code reader, bandwidth, projector, photocopying machine, public address system (Speakers, Microphone and Amplifier) and UPS. The finding also corroborates with that of Chauhan (2018) who revealed the available Koha process tools to include Internet, Computer/ Laptop, Barcode, Readers and Printers. Similarly, the findings agree with that of Ayodele, Joseph,

Helen and Felix (2013) who find out some important ICT facilities for the effective use of library application software as: computer system, bandwidth, printers, telephone, internet, scanning machine, digital camera, and multimedia. All these ICT tools are very important for the smooth take-off of library automation with effective koha software to run it. The findings also agree with the submissions of Qutab, Bhatti and Ullah (2014) who stated some varieties of ICT equipment available that can make the use of software for library operations possible to include: digital camera, photocopier, multimedia, barcode reader, scanners, server and printer. These findings as observed could be that the availability of these ICT facilities is aimed at facilitating the implementation of the Koha software and easy access of the large numbers of library users to relevant accurate and current information from both remote and immediate databases to facilitate learning, teaching and research in the universities.

Conclusion

Based on the findings of the study, the researcher concluded that, Koha software is being effectively used in universities in Benue State for integrated library management system. There is however a plethora of challenges that pose a threat to Koha usage some of which include inadequate funding, lack of consortium, inadequate power supply and inadequate managerial support among others which needs to be surmounted.

Recommendations

Based on the findings of the study, the following recommendations were made

- i. With respect to the numerous uses of Koha for integrated library management system, University libraries should incorporate library digitization into their policies and plans to maximize its effectiveness to enhance library operations
- ii. Libraries should form consortia with each other so as to discuss possible challenges and solutions encountered in the use of Koha software. Through this forum, they can be able to manage the problems that may arise in the use of the software.
- iii. Libraries should make provision for uninterrupted power supply as backup against erratic power supply through acquisition of standby generators and solar system to enhance the use of Koha software for integrated library management system.

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