

USER PERCEPTION OF THE USE OF INTEGRATED LIBRARY SOFTWARES FOR SERVICE DELIVERY IN FEDERAL UNIVERSITY LIBRARIES IN THE NIGER DELTA, NIGERIA

Abstract

Like many countries, Nigeria's university libraries services are affected by the integrated software used for service delivery. This study (conducted in 2021) examined the priorities and barriers for users perception of the use of integrated library software for service delivery in federal university libraries in the Niger Delta, Nigeria and the type of integrated software used by the Federal university libraries in Niger Delta, Nigeria, including what type of services rendered with the use of integrated library software to users, ease of use of integrated library software and benefit derived from the use and factors affecting the use were evaluated. A structured questionnaire was the instrument for data collection and was distributed to the respondents face to face at their various offices across all the university libraries in Niger Delta, Nigeria. The populace of the study was sampled using the total enumeration sampling technique because of the smaller and manageable size of the population. There are 489 responses (83% response rate) from six federal universities in the Niger Delta. The findings reveal that the University of Uyo, Akwa Ibom has the highest rate of respondents -90(18.40%) followed by Federal University Otuoke, Bayelsa State -88(17.99%). It could deduce that the Federal Universities in Niger Delta are dominated by male in Nigeria, from 24-26 years are dominated in the university system, students in 500 and 600 levels are majority of the respondents that participated in this exercise, Koha integrated software (402) had the highest response rate, majority of the respondents agreed that they used ILS to render the following services ; user registration, changing and discharging of library materials, referral service, e-reference service, internet service, electronic library service, OPAC and book reservation, majority of the respondents agreed that ILS is easier for user interface, accessing personal account is easy and straightforward, users can independently interact well with ILS and its OPAC user interface, users can easily search on their own, users can query the ILS using the keyboard, users can recover lost of information during query, users can retrieve information from the ILS without the help of a librarian and users can retrieve documents from ILS when needed, majority of the respondents agreed that ILS allow users to access to the books and other materials in the library, allows for round the clock library services, helps to know a documents reservation status, bring the library closer to the users, help to know easily the total number of books held in a library, know a document return date or date of availability in the library, allows for easy borrowing of library materials, auto-renewal of borrowed book is easy and fast, helps to know the position of a particular title held by the library, helps to know the position of a particular materials on the shelf and Helps to ascertain if a book is present in the library or not and the majority of the respondents testify that bottle necks on the use of ILS are as follows, lack of awareness, poor Internet connectivity /low bandwidth, lack of information searching skills, lack of proper guidance from librarians, lack of funds to support automation project by library management, shortage of computer systems designated for library OPAC, lack of

required ICT skills, complex OPAC interface design, erratic electricity power supply/high cost of running electricity generating sets and lack of user training on how to use the library software. The respondents were concerned about the service delivery in the library. It is expected that librarians should ensure that users get their information needs on time and in the right format and that the best integrated library software should be installed and used in library services. Keywords: Integrated library software, users perception, service delivery, Federal University Libraries, Niger Delta, Nigeria.

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Introduction

Almost all libraries in this 21st Century have a collection of both print as well as electronic resources. Due to the wide range of information resources available, it has become necessary for libraries to automate all their operations to meet the growing demand of users. Also, the pursuit for excellence in all aspects of a university education system has made it mandatory for universities across global to rise to their responsibilities. If a librarian is to render adequate services to the patrons, he/she must adjust to the recent trends and use the most recent software in library operations (Omeluzor, Adara, Ezinwayi, Bamidele & Umahi, 2012). Basiru and Adebayo (2017) asserted that before the origin of open source solutions, automation in the library was subjugated by commercial library automation packages. Heads of libraries had to choose from the plentiful availability of such library software to suit their service and patrons' needs.

However, in this age of information explosion, automating a library is a unique decision that makes the library activities easy for prompt service delivery to the users. Every client expects a quick response to their requests as well as easy access to information. Integrated library management software therefore, is designed to boost service delivery in library operation as expected by patrons. A good and reliable ILS enhances access to information resources that are physical in a library and outside, for example, books, CD ROM, e-journal, e-books, e-databases and repositories among others. It also helps to lessen time wastage in the delivery of services. There are good numbers of ILMS which are accessible in the open source stream and are available on the website in the form of downloadable code. Libraries are moving to a "free/open culture" to

stretch their services and functions. Automation in library operations is more significant than creating institutional repositories and digital libraries (Kumar & Muruli, 2017).

According to Projektlink (2010) and Wikipedia (2012), Koha is the first open-source integrated library software (ILS) in use worldwide by special, school and public libraries which its development was steered by a growing community of libraries and users collaborating to achieve their desired goal. The name koha comes from a Māori 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). Several integrated library management software that has penetrated the Nigerian libraries includes Micro CDS/ISIS (free), Library Plus (which replaced x-lib software), Green Stone Software, Graphical Library Automation System (this replaced The Information Navigator Library Software, TINLIB), Alice for Windows Software and Alexandra etcetera (Anyagugu, 2003). Others include Docuware, Strategic Library Automation Management (SLAM), Liberty 3 Software and Microsoft Access Software (Kamble, Raj & Sangeeta 2012). Most integrated libraries separate software functions into discrete programs called modules, each of them integrated with a unified interface. Muller (2011) stated that “integrated library systems (ILS) are multifunction, adaptable software applications that allow libraries to manage, catalog and disseminate information materials to patrons”.

In choosing ILS software, libraries must base their decision not only on the performance and efficiency of the system but also on its flexibility to adapt to the future demands and desires of their patrons. Pressman (2001) asserted that computer software succeeds when it meets the needs of the patrons who use it, when it performs well over a long period, when it is easy to modify and when it is easy to use. It is important to note that the whole essence of embarking on library automation in a university library is to enhance the need for the libraries to satisfy their communities, particularly in providing organized access to information stored in the library and making it accessible locally and potentially worldwide.

Brief History of Federal University Libraries in the Niger Delta

Federal University Otuoke, Bayelsa State

The Federal University of Otuoke was established in 2013 along side with library to cater for the information needs of students, lecturers, external researchers and staff of the university.

Federal University Otuoke, Library Software

The management thought the collections were few and felt the need to boost the collection through sound digital collections and thus SLAM for WINDOW was introduced but couldn't sustain the purpose. At present, the university library uses KOHA which has been adopted since 2019.

University of Benin Library (Edo State)

The University of Benin Library, also known as John Harris Library is an academic resource centre established to cater for the research, learning and teaching needs of the academic community. Since its inception in 1970, the Library has grown in leaps and bounds in response to new developments in information science and technology and other developments in the University.

University of Benin Library Management Software

John Harris Library is an automated library. The Library uses the NewGenLib Library Management Software (LMS) to manage its professional activities. NewGenLib is an open-source Integrated Library Management System (ILMS) developed by Verus Solutions Private Limited, with domain expertise provided by Kesavan Institute of Information and Knowledge Management in Hyderabad, India. However, in John Harris Library, NewGenLib was installed, configured and still being managed by the IT Team of the Library. Before the full adoption of NewGenLib in 2017, the Library used an LMS known as Strategic Library Automation and Management (SLAM). SLAM was adopted in 2000, same year the Library was automated. However, prior to the full adoption of NewGenLib in 2017, the Library introduced NewGenLib in 2012, and since that time, it was being studied and test run, before its total adoption in 2017.

Federal University of Petroleum Resources, Effurun Library (Delta State)

The Federal University of Petroleum Resources, Effurun (FUPRE) Delta state, Nigeria was established in March 2007, and the groundwork of the university library popularly referred to as FUPRE Library started on 6th September, 2010. However, FUPRE Library became operational in October 2011 after the recruitment of staff. Presently the library serves its Constituents College of Science and that of Technology.

FUPRE Library Management Software

The FUPRE library implemented her automated library project using Alexandria integrated library management software in 2015. Alexandria software adopted by FUPRE library is browser based cross platform, easy to use and it includes modules for circulation, cataloguing, acquisition, serials, patron management and flexibility repository. However, in 2019, FUPRE library migrated from

Alexandria integrated library software to Koha open sources software. Presently FUPRE library has fully adopted the Koha open source software in her operations.

University of Port Harcourt Library (Rivers State)

The University of Port Harcourt Library now known as Donald E.U. Ekong Library was established in 1975/76 session, at the time the parent institution, University of Port Harcourt was also established. When the University moved to its temporary site, the Library moved with it and was allocated a space where it finally started normal activities in 1977/1978 session with the opening of the readers' services, technical, and administration units. Readers and technical services, including charging and discharging, reference, acquisition of material among others started immediately. The Library which started with a stock of 3000 volumes and 78 periodicals now has a collection of 130, 000 volumes. It subscribes to over 10 databases which give access to a large collection of peer- reviewed journals. For example, HINARI alone has more than 8,500 peer- reviewed journals and 7,000 e-books. It has a seating capacity of above 2000 and serves as a depository for the United Nations Publications.

University of Port Harcourt Library Management Software

Donald E.U Ekong Library adopted the use of Koha library management software in performing all her library operations electronically. The basic features of Koha which facilitated its adoption by Donald E.U. Ekong library include an online public access catalogue (OPAC), web-based circulation interface, patrons' records management, online renewals and reservation of item by users, branches relationship, borrower history with comments and tags, customizable search, budgets and pricing information, automatic alert system to return the borrowed materials, serials modules, book bag and virtual shelves, multi-language OPAC support, overdue fines and overdue notices, and effective security measure to protect any unauthorized person from accessing the system.

University of Uyo Library (Akwa Ibom State)

The University of Uyo operates a multi-library system with library collections across 5 campuses namely, The main campus at use Offot, the town campus at Ikpa Road, the town campus, Annes between Ikot Ekepene and Ikpa road, the University of Uyo teaching hospital at Abak road and the Pre-Degree studies campus at Ediene Abak. The University library services a student population of about 20,000 and a staff population of about 5,000.

University of Uyo Library Management Software

The University of Uyo library adopts Koha library management software in her operations and the KOHA enabled OPAC serves as the public interface to the library's collection.

University of Calabar Library (Cross River State)

The University of Calabar Library was established in October 1973, as a library of the Calabar Campus of the university of Nigeria, Nsukka. Since its inception, it has been shifted from one site to another in search of adequate accommodation. By August 2000, the university of Calabar Library had acquired over 40,000 volumes of books and 11,000 volumes of bound journals. The volumes of books and journals acquired were greatly influenced by the increase in the number of disciplines being taught in the university. As of October 2017, the library holdings stood at 174,237 volumes of books, 9,166 bound journals and 17,268 unbound academic journals.

University of Calabar Library Management Software

The university of Calabar library is planning to adopt Koha library management software in its operations. Although this plan has been on since 2009, the university management is hopeful that the Koha library management software will be fully operational in the library in the year 2020.

Statement of the Problem

The growth of Library Management software is no doubt more visible in the 21st Century. Many academic libraries now make use of some of the available library management software to render services to users in the library. A good number of university libraries have over the years changed the library management software they adopted from one particular one to another. e.g. FUPRE library changed from the use of Alexandria. These changes arose from the users' perception of the software and how well it helps in the delivery of service effectively. Also, some library management software possesses rigid user interfaces which makes interaction with them by the users of the library a difficult task, this has made the users of the library perceive such software as not fit to deliver to them the services they expected from the library resulting in user dissatisfaction with the resources of the library. This study therefore seeks to investigate users' perceptions of the use of integrated library software for service delivery in federal university libraries in the Niger Delta.

Objective of the Study

The general objective of this study is to investigate users' perceptions of the use of integrated library software for service delivery in federal university libraries in the Niger Delta. The specific objectives are to:

1. determine the types of integrated library software used in federal university libraries in the Niger Delta;
2. determine the services rendered to users with the use of integrated library software by federal university libraries in the Niger Delta;
3. determine the ease of use of integrated library software among users in federal university libraries in the Niger Delta;
4. determine the benefits derived from the use of integrated library software by users in federal university libraries in the Niger Delta and
5. identify the factors affecting the use of integrated library software among users in federal university libraries in the Niger Delta.

Research Questions

The following research questions have been raised to guide this study:

1. What are the types of integrated library software in use by federal university libraries in the Niger Delta?
2. What are the services rendered to the users with the use of integrated library services by federal university libraries in the Niger Delta?
3. How easily usable is integrated library software to users in federal university libraries in the Niger Delta?
4. What are the benefits derived from the use of integrated library software by users in federal university libraries in the Niger Delta?
5. What are the factors affecting the use of integrated library software among users in federal university libraries in the Niger Delta?

Literature Review

Types of Integrated Library Software Used in University Libraries

Library Management Software is a software package that is used by libraries to perform the housekeeping functions of the library such as storing all the item details like authors name, edition, price, etc. of all the books in a library database. It helps to provide information on any book present in library to the user as well as staff members. Library Management Software keeps track of all the books that are dispensed, returned and added to the library. Overseeing fee collection and fines issued to defaulters of information resources are among other important functions of LMS Software. Overall having a LMS Software is vital for efficient, user-friendly, fast and secure library management - be it a small size school library having limited users and books or a large size public library (Software suggest, 2019). According to Projektlink (2010) and Wikipedia (2012), "Koha is the first open-source integrated library software (ILS) that is mostly

used in public, school and special libraries which its development was steered by a growing community of libraries and users team up to achieve their desired goal”. Koha sets the standard for open-source integrated library automation systems. Koha is used universally, its development is steered by a growing community of libraries working together to achieve their technology goals. However, Software Suggest (2019) asserted that LMS software comes in various shape and sizes (e.g. small library software, cloud -based library management software etc.), platform-specific (e.g. Windows-only, Linux-only, MAC-only) or supports multiple platforms (covering MAC, Linux, UNIX etc.), publisher-specific (e.g. Microsoft) or multi-vendor, static (i.e. fixed, updated manually by the administrator) or dynamic (automatically updated by the SAM solution vendor), simple recognition (e.g. using just exe data) or complex recognition (e.g. tying together multiple footprints such as executable meta, registry entries, SWID tag data, package manager details or product specific details gathered by running scripts). The Software suggest (2019) however revealed that some commonly used LMS Software in libraries are – SURPASS, Lucidea Integrated Library Systems, Koha ILS, L4U, OPALS, Destiny Library Manager, Handy Library Manager, Insignia Library System, Access-It Library, MODERNLIB, Atrium, LIBRARIAN and Readerware among others.

In a study conducted by Sharma (2007) on library automation software packages used in academic libraries of Nepal: A comparative study, it was observed that the following software packages are being used in academic institutions in Nepal: CDS/ISIS DOS and Window version; Software for University Library (SOUL) 23; Alice for Windows (AFW); MIDAS LMS; LibInfo; Library Management System (LMS); Library Manager; PhpMyLibrary. In the same vein, Uzomba, Oyebola and Izuchukwu (2015) asserted that there are many diverse kinds of open source library software solutions out there today that could be embraced by the library. Some of the open source software in today’s market include Emilda, EspaBiblio, Evergreen, Gnuteca, InfoCID, Jayuya, Koha, NewGenLib. oBiblio, OPALS, OpenAmapthèque, OpenBiblio, PhpMyLibrary, PMB, Senayan etc. The authors however pointed out that of all the open source software available in the market, Koha and Evergreen have gained major extensions in functionality not present in their counterparts. Omopupa, Adedeji and Suluman-Haroon (2019) in their study of adoption and use of Koha Integrated Library System in the University of Ilorin Library pointed out that apart from Koha, other OSS for libraries includes WEBLIS, ABCD Software, GreenStone, Evergreen Software, WinISIS software, NewGenLib, Emilda, PhpMyBibli, Fedora and Avanti. Among all the above-mentioned open software, Koha is the most used and this was evident from the finding of Iroaganachi, Iwu-James and Esse, (2015) which revealed that Koha software has gained recognition over the years especially academic Libraries in Nigeria with the highest software frequently used in South Africa and Nigeria.

Services Rendered to Users in the Library using Library Management Software

Muller (2011) stated that “integrated library systems (ILS) are multifunction, adaptable software applications that allow libraries to manage, catalog and circulate their materials to patrons”. In choosing ILS software, libraries must base their decision not only on the performance and efficiency of the system but also on its fundamental flexibility to readily adapt to the future demands and needs of their patrons. Breeding (2012) posited that the Integrated Library System, or ILS, provides computerization for all aspects of the library operation. These products are generally organized into modules that address specific functional areas”. Standard modules include cataloging for creating bibliographic records that represent works in the library’s collection, circulation that automates tasks related to loaning items to patrons, serials control for managing periodicals and serials, acquisitions to handle the procurement process for new items added to the collection, and the online public access catalog to allow library users to search or browse through the library’s collection (Uzomba, Oyebola & Izuchukwu, 2015). Omeluzor, et al (2012) opined that “integrated library management software is designed to boost all library services as expected by the library patrons”. A good and reliable ILS upsurges 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 and repositories among others. It also helps to lessen time wastage in the delivery of services to library users.

Hussaini, Vashistha, Jimoh and Jimah (2017) pointed out that the usage of software management software/databases cannot be applied in all the sections of the library, in view of this, the authors asserted that some of the sections in the library where software/databases can be applied and be used to render services to users in the library are acquisition, Online Public Access Catalogue (OPAC), Circulation, Serial Control, Digital Library and Administration. The circulation services of the library are now being discharged with the use of integrated library software. such services include online charging and discharging of information resources, online registration of clienteles and other services. Online Public Access Catalogue service as explained by Hussaini, Vashistha, Jimoh and Jimah (2017) allows users to locate already processed information resources in the library by directing the staff and user to the appropriate location where the information resources can be found in the library. This is done by entering in the following search terms like title, author, class mark or call number among others. The mainstream of the libraries is now using OPAC system for providing automated library services. The authors further explained that Cataloguing service is done using the integrated library software according to the standardized code of cataloguing using the Machine Readable Catalogue (MARC) format imputed into the OPAC of various libraries which is usually done from online catalogue of the Library of Congress and that of other participating libraries. For example in Ahmadu Bello University, Zaria,

after excision, each item is copied in the OPAC carrying each bibliographical details of the information resources, then a barcode is finally allocated and then click on save where it can be accessed universally by participating libraries. Classification service is done by assigning class mark or call numbers using a standardized scheme of classification assigned to every information resources. Library of Congress has that feature particularly when one is using VTLIS, by using the search term like title, author, ISBN etc, full information of the information resources would be displayed, and one extract the relevant call number to the title of the book. Also, in a study of the application of information and communication technologies (ICTs) to library operations and routines in selected Nigerian Federal University Libraries by Whong and Zakari(2014), the study found among others that ICT facilities are frequently applied in cataloguing and classification of information resources with a score of 250 (74%).Also, in a study by Abbas (2014), it was found that all the modules are partially implemented in ABU, Zaria while only cataloguing modules have been completed at University of Ibadan Library

Benefits of the use of Integrated Library Software by Library Users

The importance of integrated systems in library activities such as cataloguing, circulation, acquisition and serials management, etc is no longer arguable as libraries all over the world have realized the need to shift from their analog practices into integrated systems operations. Consequently, academic libraries in Nigeria are changing from their isolated practice into integrated systems through the advent of computers (Uzomba, Oyebola & Izuchukwu, 2015). Open sources software such as KOHA according to Boss (2008) is free software that includes the source code used to create it so that users can modify it 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). Boss (2008) however stated that the perceived advantages of open source software are: ability to tailor to fit local needs; no restriction on the use and perceived low cost. Sowards (2019) opined that commonly used ILS systems are separated into operating modules that allow for the precise monitoring of serials, catalogs, acquisitions, and how these materials circulate. The primary objective of using an ILS is to achieve flexibility and to save time in the process of accessing information materials. The author further expressed that the major advantages of using an ILS system to manage libraries include: it encourages ease of use of library resources, allows highly-secured cloud data management, allows mobile access, and enhances reporting and monitoring among others.

In the same vein, Sriram (2019) asserted that some of the advantages of utilizing ILS in the library include: simple and easy to use, increased library engagement, efficient cloud data management, highly secure, scalable and reliable, mobile accessibility, dynamic reports, error-

free, innovation and cost-effective among others. With the increasing advancement of cutting-edge technologies, like tabs and mobiles, the Library Management Software has become very simple and easy to use. The Library Management Software permits librarians to manage all the activities and work related to the library on one platform. The web based Library Management System is essential in this present time for service delivery to students, faculty, external researchers and staff. All the details of a particular book such as the authors name, edition, etc, can be managed with the application of library management software thereby making the job of librarians less stressful. According to our campus (2019), some of the advantages of the use of library management system that should be known to educational institutions and their libraries include: Record maintenance; Web-Based solution; Saves time and cost; Secure and reliable; Increases efficiency and they are simple and easy to use.

Adebesin (2015) also asserted that the importance of library management software in library operation include: Improved patron services through greater access to accurate information; Increased productivity and job satisfaction among staff members as it eradicates repetition of effort; cheaper and safer means of saving and keeping of information; Easier access to information like management reports and stock etc. as well as accurate and faster results from statistical analyses; Reduces errors and eliminating repetitive manual processing; Greater accountability and transparency in operations; Improved efficiency and effectiveness in administration and management as it has unprecedented access to real- time information and more reliable security for sensitive and confidential information. Library management software facilitates library administrators to keep an eye on the library department's all functions. Also, it enables librarians and users to save time on daunting tasks and enhances efficiency. By using library management software, academic library management would be able to follow the work outline and fineness of different librarians' capabilities. Additionally, they get an opportunity to know how well-maintained the record of issued books and collections (MyEdu, 2019).

Datir (2018) asserted that the best way to take the library to a higher level of service delivery is to go digital through the adoption and use of library management software which will avail the students the opportunity to use a Smartphone app such as M-OPAC which can easily access the library's database stored in the library management software. This makes the library more effective in their service delivery to their user community. Datire further stated that there are a few top reasons why a library must adopt a library management system. These reasons according to him are: library management system/software helps the librarians and library management to manage the library constructively; Reduces the operating cost of the library; Saves the time of the librarians, other staff and students alike; Turn the library into a recognized 21st Century/smart library.

Factors Affecting the Use of Integrated Library Software

As libraries make decisions about what software to use when automating their operations, decision-makers to have a solid grasp of the available options to avoid difficulties when using the software to render services to users. In choosing ILS software, libraries must base their decision not only on the effectiveness of the system, but also on its elasticity to adapt to the future needs of their patrons. Uzomba, Oyebola and Izuchukwu (2015) asserted that experience has revealed that many libraries in Nigeria run into one difficult or the other due to the wrong choice of library software. i.e. a wrong choice in the adoption process of library software can affect its usage hence making the efforts put into the project becomes an effort in futility. Consequently, Uzomba, Oyebola and Izuchukwu (2015) reiterated that though open source software are considered to be the best option for libraries, available literature has shown that some issues that are related to its adoption and usage. Some of these problems according to the authors are highlighted below: lack of support; poor technical knowledge from the staff; lack of quality documentation; poor funding; poor power supply and data migration. Other challenges to the use of open source software as identified by the authors are: cost of procurement of the hardware/software, lack of consortium, dearth of training and re-training of staff, crashing problem, maintenance cost, etcetera.

To complement the aforementioned, inadequate provision of funds for university libraries and lack of maintenance support for the software were rated as the greatest problems associated with software use in libraries in Nigeria (Imo and Igbo, 2011). Also, Kari and Baro (2014) found that the nonexistence of skilled manpower, inadequate funding, inadequate system (computers) and erratic power supply are the major problems university libraries users in Nigeria bump into while using library software. In the same vein, Adeyinka, Neemah, Olaniyi, Ajala and Adebisi (2017) carried out a study on assessment of the use of Koha library software in four selected university libraries in Nigeria and found that power failure, poor management and inadequate in-house experts, poor internet facility, software problems are the major challenges facing the use of library software in academic libraries in Nigeria. Tella and Oladeji (2017) conducted an empirical investigation on the impact of Koha on library services in selected academic libraries in Nigeria and found that some of the challenges with the use of Koha library software includes issues relating to the maintenance cost of Koha which was found to be pretty low and there is seeming there is poor human expertise in handling the software in Universities. The study also found that there are negligible software related problems including installation of the software.

Research Methodology

A descriptive survey research design was adopted for this study. The target population for this study comprises 600 (six hundred) registered undergraduate library users of the six federal universities in the Niger Delta. The entire population of the study was sampled using the total enumeration sampling technique because of the small and manageable size of the population. The instrument used for data collection was a structured questionnaire that was distributed to the respondents face to face at their various offices across all the university libraries in Niger Delta, Nigeria. The items were tested for significance at the 0.05 level of significance. The Cronbach alpha analysis showed the case processing summary reliability statistics; the computed values are: use perception on the use of Integrated library software scale has alpha .70, $p = 0.05$ level of significance and service delivery scale had alpha .72, $p = 0.05$ level of significance. A total of 600 copies of the questionnaire were distributed to the respondent and a total of 489 was duly completed and found usable, therefore it was 83% response rate. The data collected for this study were analyzed using mean and standard deviation, simple percentage and frequency counts.

Results

This section covers the results of the study. Table 1 reveals institutions of respondents. A total of 489 registered undergraduate library users from six federal universities in the Niger Delta responded to the questionnaire. As indicated university of Uyo, Akwa Ibom has the highest rate of respondents -90(18.40%) followed by Federal University Otuoke, Bayelsa State -88(17.99%).

Table I: Name of Institutions of Respondents

Name of Institutions		State	Ownership	Number of students sampled	Number Response Retrieved	Percentage
1	University of Uyo, Akwa Ibom State.	Akwa Ibom	Federal	100	90	18.40
2	Federal University Otuoke, Bayelsa State.	Bayelsa	Federal	100	88	17.99
3	University of Calabar, Cross River state.	Cross River	Federal	100	70	14.31
4	Federal university of Petroleum Resources , Effurun, Delta State	Delta	Federal	100	72	14.72
5	University of Benin, Benin City, Edo State.	Edo	Federal	100	87	17.79
6.	University of Port-Harcourt, Rivers State.	Rivers	Federal	100	82	16.76
Total				600	489	100

Table 2: Gender of respondents

S/N	Gender of respondents	Frequency	Percentage
1	Female	212	43.35

2	Male	277	56.64
Total		489	100

Table 2 shows gender of respondents. The highest response rate 277(56.64%) are male followed by 212(43.35%) who are female and it could deduce that the Federal Universities in Niger Delta are dominated by male in Nigeria.

Table 3: Age of Respondents

Age of Respondents	Frequency	Percentage
18-20years	90	18.40
21-23 years	110	22.49
24-26 years	180	36.80
27and above	109	22.29
Total	489	100

Table 3, reveals the age of respondents. Ages 24-26 had the highest response rate -180(36.80%) followed by ages 21-23(22.49%).It could be deduced that from 24-26 years are dominated in the university system.

Table 4: Level of Study

Level of study	Frequency	Percentage
100	50	10.22
200	69	14.11
300	80	16.35
400	70	14.31
500	120	24.53
600	100	20.44
Total	489	100

Table 4, reveals that students in 500 and 600 levels are majority of the respondents that participated in this exercise. It could be deduced that are mostly interested in research and their quest for recent information in the area of specialization is paramount to them.

Table 5:Types of integrated library Software used in federal University libraries

Types of integrated library software	Frequency
Alexandria library software	-
Koha	402
Greenstone	-
Alice for windows	-
Glass	-
TINLIB	-
X-LIB	-
CD ISIS	-
Evergreen	-

LIBSYS	-
SLAM	87
Dspace	-
Liberty 3	-
Docuware	-
Virtual E-LIB	-
Insignia Library System	-
MODERLIB	-

Table 5, shows that Koha integrated software (402) had the highest response rate it could be deduced that the Koha ILS is flexible and can accommodate many features unlike other software. This is in accordance with Projektlink (2010) and Wikipedia (2012), who claimed “Koha is the first open-source integrated library software (ILS) in use worldwide by public, higher institutions, school and special libraries which its development was steered by a growing community of libraries and users collaborating to achieve their technological goal”.

Table 6 : Services Rendered to Users with the use of Integrated Library Software by University Libraries

Services Rendered in University Libraries using Integrated Library Software	Options			
	Agree	%	Disagree	%
User Registration	489	100	00	00
Changing and Discharging of library Materials(Loan Service)	489	100	00	00
Interlibrary Loan	00	00	489	100
Referral Service	489	100	00	00
E- reference Service	489	100	00	00
Selective Dissemination of Information (SDI)	00	00	489	100
Internet Service	489	100	00	00
Electronic Library Service	489	100	00	00
OPAC	489	100	00	00
Book Reservation Service	489	100	00	00

Table 6 shows that majority of the respondents agreed that they used ILS to render the following services ; user registration, charging and discharging of library materials, referral service,e-reference service,internet service,electronic library service, OPAC and book reservation. This is in an accordance with Muller (2011) who asserted that “integrated library systems (ILS) are

multifunction, adaptable software applications that allow libraries to manage, catalog and circulate their materials to patrons”.

Table 7 :Ease of Use of Integrated Library Software to Users in Federal University Libraries

Ease of Use of Integrated Library Software to Users in Federal University Libraries	Options			
	Agree	%	Disagree	%
Your university library software user interface is easy to relate with	489	100	00	00
Accessing the account created for me using the library software is straightforward	489	100	00	00
I can independently interact well with my university library software and its OPAC user interface	489	100	00	00
I can easily search the library on my own	489	100	00	00
I can easily query the library software in my university using the keyboard	489	100	00	00
I can use Boolean(OR,NOT,AND) search strategy to get information from software	00	00	489	100
I Can Use Truncation (*) search strategy to get information from library software	00	00	489	100
I can recover lost information during queries while interacting with my university library software	489	100	00	00
I can retrieve information from the library software without the help of a librarian	489	100	00	00
I can confidently retrieve documents from the software when needed	489	100	00	00
I can use the software to locate the shelf number of books and journals	00	00	489	100
I can use the software to know the status of a book/journal ,i.e whether they are in the library or out on loan.	00	00	489	100

Table 7 reveals that majority of the respondents agreed that ILS is easier for user interface, accessing the personal account is straightforward,users can independently interact well with ILS and its OPAC user

interface, users can easily search on their own, users can query the ILS using the keyboard, users can recover lost of information during query, users can retrieve information from the ILS without the help of a librarian and users can retrieve documents from ILS when needed. This is supported by Hussaini, Vashistha, Jimoh and Jimah (2017) who pointed out that the usage of software management software/databases can be applied to render services to users in the library are charging and discharging of borrowed library materials , Online Public Access Catalogue (OPAC) among others.

Table 8 :Benefits of the use of Integrated Library Software by Users in Federal University Libraries

Benefits of the use of Integrated Library Software	Options			
	Agree	%	Disagree	%
Allow for easy access to the books and other materias in the library	489	100	00	00
Allows for round the clock library services	489	100	00	00
Helps to know a documents reservation status	489	100	00	00
Bring the library closer to the users	489	100	00	00
Help to know easily the total number of books held in a library	489	100	00	00
Know a document return date or date of availability in the library	489	100	00	00
Allows for easy borrowing of library materials	489	100	00	00
Auto-renewal of borrowed book is easy and fast	489	100	00	00
Helps to know the latest materials acquired in the library	00	00	489	100
Helps to know the position of a particular title held by the library	489	100	00	00
Helps to know the position of a particular material on the shelf	489	100	00	00
Helps to ascertain if a book is present in the library or not	489	100	00	00

Table 8 reveals that the majority of the respondents agreed that ILS allow users access to books and other materials in the library, allows for round the clock library services, helps to know a documents reservation status, bring the library closer to the users, help to know easily the total number of books held in a library, know a document return date or date of availability in the library, allows for easy borrowing of library materials, auto-renewal of borrowed book is easy and fast, helps to know the position of a particular title held by the library, helps to know the position of a particular materials on the shelf and Helps to ascertain if a book is present in the library or not. This is in accordance with MyEdu (2019) who

asserted that ILS give librarians and users the opportunities to know how well-maintained the record of issued books and how to access information on shelves among others.

Table 9 :Factors affecting the use of integrated library software among users in Federal University Libraries

Factors affecting the use of integrated library software	Options			
	Agree	%	Disagree	%
Lack of awareness	489	100	00	00
Poor Internet connectivity /low bandwidth	489	100	00	00
Lack of information searching skills	489	100	00	00
Lack of proper guidance from librarians	489	100	00	00
Lack of funds to support automation project by library management	489	100	00	00
Shortage of computer systems designated for library OPAC	489	100	00	00
Lack of required ICT skills	489	100	00	00
Complex OPAC interface design	489	100	00	00
Erratic electricity power supply/high cost of running electricity generating sets	489	100	00	00
Lack of co-operation from library staff	00	00	489	100
Lack of user training on how to use the library software	489	100	00	00

Table 9 reveals that the majority of the respondents testify that bottle necks on the use of ILS are as follows, lack of awareness, poor Internet connectivity /low bandwidth, lack of information searching skills, lack of proper guidance from librarians, lack of funds to support automation project by library management, shortage of computer systems designated for library OPAC, lack of required ICT skills, complex OPAC interface design, erratic electricity power supply/high cost of running electricity generating sets and lack of user training on how to use the library software. This is in accordance with Tella and Oladeji (2017) who found that some of the challenges with the use of Koha library software include issues relating to the maintenance cost of Koha which was found to be pretty low and there is seeming there is poor human expertise in handling the software in universities.

Discussion of findings

In this study, the researchers have resorted to the use of a structured questionnaire to collect data from respondents. The findings revealed There are 489 responses (83% response rate) from six federal universities in the Niger Delta. The findings reveal that university of Uyo, Akwa Ibom

has the highest rate of respondents -90(18.40%) followed by Federal University Otuoke, Bayelsa State -88(17.99%). It could deduced that the Federal Universities in Niger Delta are dominated by male in Nigeria, from 24-26 years are dominated in the university system, students in 500 and 600 levels are majority of the respondents that participated in this exercise and Koha integrated software (402) had the highest response rate. This is in accordance with Iroaganachi, Iwu-James and Esse, (2015) which revealed that Koha software has gained popularity over the years especially academic Libraries in Nigeria with the highest software frequently used in South Africa and Nigeria. However, the majority of the respondents agreed that they used ILS to render the following services ; user registration, charging and discharging of library materials, referral service, e-reference service, internet service, electronic library service, OPAC and book reservation. This is supported by Breeding (2012) who posited that the Integrated Library System, or ILS, provides computer automation for all aspects of the operation of a library. In addition, the majority of the respondents agreed that ILS is easier for user interface, accessing personal account is straightforward, users can independently interact well with ILS and its OPAC user interface, users can easily search on their own, users can query the ILS using the keyboard, users can recover lost of information during queries, users can retrieve information from the ILS without the help of a librarian and users can retrieve documents from ILS when needed. This is in accordance with Sriram (2019) who asserted that some of the advantages of utilizing ILS in the library include: simple and easy to use, increased library engagement, efficient cloud data management, highly secure, scalable and reliable, mobile accessibility, dynamic reports, error-free, innovation and cost-effective among others. The finding reveals that, the majority of the respondents agreed that ILS allow users access to the books and other materials in the library, allows for round the clock library services, helps to know a documents reservation status, bring the library closer to the users, help to know easily the total number of books held in a library, know a document return date or date of availability in the library, allows for easy borrowing of library materials, auto-renewal of borrowed book is easy and fast, helps to know the position of a particular title held by the library, helps to know the position of a particular materials on the shelf and helps to ascertain if a book is present in the library or not . This is supported by Datir (2018) who asserted that best way to take the library to a higher level of service delivery is to go digital through the adoption and use of library management software which will avail the students the opportunity to use a Smartphone app such as M-OPAC which can easily access the library's database stored in the library management software. The majority of the respondents testify that bottle necks on the use of ILS are as follows, lack of awareness, poor Internet connectivity /low bandwidth, lack of information searching skills, lack of proper guidance from librarians, lack of funds to support automation project by library management, shortage of computer systems designated for library OPAC, lack of required ICT skills, complex OPAC interface design, erratic electricity power supply/high cost of running electricity generating sets and lack of user training on how to use the library software. This is inline with Kari and Baro (2014) who asserted that Lack of skilled manpower, lack of funding, lack of system (computers) and erratic power supply are the major problems university libraries users in Nigeria encountered while using library software

Conclusion

Based on the findings of this study, it is concluded that user perception of the use of integrated library software for service delivery is paramount. The study reveals the various types of integrated library software used in library operations in federal university libraries in Niger

Delta, Nigeria. The various services rendered in university libraries using integrated library software, ease of use of integrated library software to users, benefits of the use of integrated library software and factors affecting the use of the integrated library software. The purpose of this study is to ensure that integrated library software used in federal university libraries has the features that can render effective service delivery to users. The study will be helpful for university librarians to know where to source for genuine integrated library software. This study will be made available to the Federal University libraries in Niger Delta, Nigeria to enable them to know the integrated library software that will suit their library operations where necessary.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Further research should be conducted on integrated library software in the Federal University Libraries South- South, Nigeria.
2. The study has revealed the various types of integrated library software used in university libraries in Niger Delta. The university librarians in federal university libraries in conjunction with integrated library software experts ensure work out modalities that will bring out features that will suit and enhance their library operations.