



**Identified Challenges that Impede the Effective Use of Library Management Software  
Private University Libraries in Northern Nigeria**

**Ahmad Lawan**

**University Library,**

**Bayero University, Kano**

**E-mail: [ahmadlawan387@gmail.com](mailto:ahmadlawan387@gmail.com)**

**Abstract**

*The study examines the identified challenges that impede the effective use of library management software in private university libraries of Northern Nigeria. Library management software enables library staff to serve library patrons better by facilitating, execution of multitude operational tasks such as cataloguing, acquisition, circulation, OPAC, management of e-resources and reference services among others with less stress. The objectives of the study were to identify the types of LMS available in the private universities under study, challenges identified that impede the effective use of LMS in the private university of Northern Nigeria. Related literature to this study were reviewed. Qualitative research methodology was adopted using narrative research design. The population of the study comprises a University Librarians and E-Librarians of the private University libraries studied. Interview was the instrument used for data and collection and the data obtained was analyzed using thematic qualitative data analysis. The findings of the study revealed that, various types of LMS were deployed and maintained by the University libraries studied, such as, KOHA, NewGenLib among others. However, the study also revealed challenges that impede the effective use of Library Management software such as: poor technical support from the suppliers, inadequate technical expertise, in adequate ICT facilities, erratic power supply, lack of adequate power back-up facilities, poor internet services among others The study recommend that, management of the universities should provide constant power supply through the provision of power backups such as inverters, and solar systems to complement the standby generator and the national power supply, adequate ICT facilities, adequate finance, as well as enough manpower for managing the software to render effective services to the library users.*

**Keywords:** Management, challenges, Library management software, University Libraries, Nigeria

**Introduction**

The 21<sup>st</sup> century can best be described as an era of information revolution, with the presence of information-bearing materials/resources in diverse formats namely, text, image, video, and audio. Information communication technologies have made significant progress in the access and distribution of information to users. This advancement in technology has led to a new concept known as library application software packages. According to, Umahi (2012) Library



management software is designed to enhance all library routine activities as expected by the library users. A good and reliable library management software enhances management, control, and easy access to information resources that are physical in a library and outside, for example, books, CD ROMs, e-journals, e-books, e-databases, and repositories, among others. It also help to reduce time wastage in the delivery of services to the library users.

Similarly, it enables library staff to serve library patrons better by facilitating, execution of multitude operational tasks such as cataloguing, acquisition, circulation, OPAC, management of e-resources and reference services among others with less stress. Despite the importance of library management software (LMS) in library services, it has been observed that, there is a lack of Software upgrading in the selected private university Libraries. Again, most of the libraries are not going with the current trends of upgrading their version of library management software by paying as per their requested. Notwithstanding, new security features and other new modules are being integrated into the software every day. However, this condition could therefore be attributed to the lack of commitments from the private universities to provide the required annual payment to the vendors to effectively manage the software and increase efficiency in library operation.

. It is on this basis that this study examined the Identified challenges that impede the effective use of library management software by private university libraries in Northern Nigeria.

### **Objectives of the Study**

The aim of this research work is to investigate the challenges associated with use of library management software in private university libraries of Northern Nigeria. However, the specific objectives are to:

1. Identify the type of library management software available in private university libraries in Northern Nigeria.
2. Identify the challenges associated with the effective use of library management software in private university libraries.

### **Literature Review**

The review of literature has revealed that a lot of writings exist about library management software in the form of books, journals, theses, and conference proceedings.

### **Types of Library Management Software**

University libraries acquire and install different types of integrated library management software packages to manage their operation and services to reduce in efficiency of their service delivery. Integrated library management software is a simple programme to perform the job of acquisition, cataloguing, circulation, serials control and others. However, university libraries select, acquire and install different types of management software packages to manage their operations and services to ensure efficiency in their service delivery.

However, Ukachi, Nwachukwu, and Onuoha (2014) stated that "library software comes in two different types, the proprietary software (those that require the payment of subscription fees) and the Open Source Software (OSS). The terms Open Source Software Free/Libre Open Source Software" (FLOSS) are often used interchangeably Johnson and Christensen (2012)). Similarly,



Garoufallou and Charitopoulou (2011) defined open Source Software as the source code which is available along with the software and user has the liberty to run, copy, and distribute, study and alter the software under the licensing policies of OSS. The reason OSS has been so successful is that it provides users with ability to choose the technology best suited for their needs without being tied to a particular vendor solution.

On the other hand, the word proprietary is derived from the Latin word "proprietas" meaning property. Proprietary software is a software that is owned by an individual or a company (generally the one that developed it). There are almost always major limitations on its use, and its source code is almost always kept secret. Source code is the form in which a program is formerly written by human using a programming language and prior to being converted to machine code which is straightforwardly readable by a computer's CPU (central processing unit) (Gauri, Shipra and, Rachna (2016). The restrictions on the use of proprietary software are generally enumerated in the end user license agreements (EULAs) that users must consent to. For software provided by large companies, EULAs are generally long and complicated contracts. Among the most familiar prohibitions for such programs are making unauthorized copies, using it on more than a certain number of computers.

"Proprietary software" in a nutshell means that it costs money and that the actual code of the software is restricted, in that the code of the software cannot be modified, copied, or changed from its original construction. The code is unreadable" and pretty much is what it is. Some of the major proprietary LMS products according to Breeding (2012) include; virtua from VTLS Inc., Symphony from SirsiDynix, Millennium from Innovative Interfaces, Aleph, from Ex Libris Group, voyager from Ex Libris Group, Polaris from Polaris Library Systems and many Others.

### **Challenges associated with use of library management software**

There are many challenges with regard to management of LMS world over. It is in this light that Gbadamosi (2012) said that management ILS has faced varied problems and challenges which may differ from institution to institution depending on the disposition of the institution to ICT application, funding and technical expertise of the librarian anchoring the project. Chisenga (2014) postulates that challenges facing library automation projects in Sub-Saharan Africa include lack of budgets, inadequate ICT facilities, lack of ICT strategies, low skills levels of users, lack of qualified staff in ICT, lack of commitment by institutional management, and reluctance among staff to use ICT. Therefore, some institutions have abruptly stopped the implementation of library management software in their libraries simply because at some point they realized to their dismay that the entire project will be too expensive to finish. Budgets must therefore be drawn to cater for all stages of the systems' design, development, testing and deployment. There must be adequate budget lines that will cater for increase in prices of logistics such as servers, network infrastructure, and barcode scanners. Similarly, Adeyinka, Neemah and Olanniyi, (2017) in a study on assessment of the Use of KOHA library Software in four Selected University Libraries in Nigeria. The findings revealed poor management 33(64.7%), inadequate infrastructural facilities 30(58.8%), and power failure (43



(84.3%)) are the three Major challenges. The rest were related to Software problems e.g. hanging, malfunctioning, inadequate infrastructural facilities, etc which are as a result of poor internet facilities and bandwidth. Within the Zambian academic library context, Lungu and Mwamba (2010) found that in addition to the findings of Chisenga (2014), that there is a lack of motivation and enthusiasm by library management to embark on the implementation of library management software projects. However, Singh (2013) pointed out major challenges that are associated with FLOSS even though they are free, which include; Vendor lock-in and reliance, high initial cost and future maintenance cost of library management software, they are bound to face challenges such as: lack of functional modules and inadequate staff technical expertise. Accordingly, Nok (2016) reports that the unavailability of reliable Wide Area Network (WAN), Local Area Network (LAN) and irregular electricity supply across Nigerian University Campuses militates against the effective utilization of library management software in Nigeria. Other challenges identified by Nok (2016) include low level of computer literacy amongst staff, poor maintenance culture, inadequate funding of library services and lack of adequate preparatory training in information science necessary for such automation projects.

It is in line with this that not much has been known about the challenges facing private university libraries in Northern Nigeria, that this research intend to fill the gap on the challenges of university libraries in the effective utilization of LMS. As such librarians in university libraries need to be acquainted with these various challenges when deploying and installing LMS for library operations and services

### **Methodology**

Qualitative research methodology was adopted using narrative research design. The secondary population of the study comprised all the seventeen (17) private universities in northern Nigeria. However, six (6) universities were sampled because they were found to have LMS in their libraries. Therefore, the primary population of the study comprised the University librarians and e-librarians of the sampled private university libraries to serve as participants for the study from each of the libraries, making twelve (12) Staff which made up the sample for the study; their choice was informed by the fact that they are responsible for using the library management software in their respective libraries. In the same vain, qualitative methodology with narrative base design was used. The Interview was used in gathering data and the data obtained was analyzed using thematic qualitative data analysis.

### **Results**

#### **Types of library management software available in the university libraries**

The researcher asked the participants on types of library management software (LMSs) available in their libraries.



**Table: 1 Types of library management software available in university library**

<b>Types of library management software</b>	<b>AUK</b> (P1, P2)	<b>SUN</b> (P3, P4)	<b>KUW</b> (P5, P6)	<b>AAU</b> (P7, P8)	<b>BUA</b> (P9, P10)	<b>BUN</b> (P11, P12)
<b>KOHA</b>	√	√	×	√	√	×
<b>CoNCos</b>	×	×	√	×	×	×
<b>Dspace</b>	×	×	×	×	×	√
<b>Newgenlib</b>	×	×	×	×	×	√

Key: √= available, ×= not available

AUK: AlQalam University, Katsina, SUK: Skyline University Kano, KUW: Kwararrafa University Wukari, Tararba, AAU: AbtiAmerican University, Adamawa, BUA: Baze university Abuja, BUN: Bingham University, Nasarawa

When asked of the types of LMS, the participants in AlQalam University, Katsina stated that: *the type of (LMSs) commonly available in this library is KOHA (P1, P2)*. Further, at Skyline University Kano, the response was a little different, the participants aired out *that Here in Skyline University Kano as of today we are having KOHA and ILPS. Management Software (P3, P4)*. In another development, those at Kwararrafa University Wukari, Tararba, stated that: *out of the different types of Library management software in the market we choose to use in this library CoNCos (P5, P6)*. At AbtiAmerican University, Adamawa, they Stated that: *the types of Library management software available in this library is KOHA (P7, P8)*. In another development, at Baze University Abuja, they stated that: *The type of Library management software in use in this library is KOHA management software (P9, P10)*. The respondents at Bingham University, Nasarawa Stated that: *we have acquired and using of DSpace, Koha and Newgenlib as Library management software in this Library (P11, P12)*.

In response to the above question, there were different types of (LMSs) available. The participants have identified different (LMSs) available in the Private university libraries understudy ranging from KOHA, Dspace, NewGenLib, and CoNCos.

### **Challenges That Impede the Effective Management of Library Management Software:**

The researcher asked the participants of the challenges associated with the management of Library Management software. The responses obtained by the researcher revealed that there are number of challenges associated with the management of Library Management software as revealed by all the participants. The responses of the participants are presented Table 4.10.





**Table 4.6: Challenges Associated with the Management of Library Management Software**

<b>Challenges</b>	<b>AUK (P1, P2)</b>	<b>SUN (P3, P4)</b>	<b>KUW (P5, P6)</b>	<b>AAU (P7, P8)</b>	<b>BUA (P9, P10)</b>	<b>BUN (P11, P12)</b>
Erratic power supply	√	√	√	√	√	√
Inadequate technical expertise	√	√	√	√	√	√
Inadequate ICT facilities	√	√	√	√	√	√
Poor staff training	√	√	√	√	√	√
Inadequate finance	√	√	√	√	√	√
Lack of manpower	√	√	√	√	√	√

**Key:** √= used, ×= not used

On the challenges associated with use of LMS participant **P2** stated that: *The challenges faced include; erratic power supply, inadequate technical expertise, inadequate ICT facilities in the library, and poor staff training.* While **P4** responded that; *the challenges were erratic power supply, inadequate technical expertise, and inadequate ICT facilities in the library.*

Further, **P6** revealed that: *challenges faced include erratic power supply, inadequate technical expertise, inadequate ICT facilities in the library, and Poor staff training.* In addition to that, **P8** stated that: *The difficulties we are facing in managing the software were, the high cost of maintenance.* However, **P10** also stated that: *challenges such as; high cost of maintenance, inadequate ICT facilities, and lack of manpower are our problem.* Lastly, **P12** stated that; *the major challenges we are facing are; inadequate ICT facilities, the high cost of internet, and lack of manpower.* Thus, from the above, the challenges faced by the libraries under study were; erratic power supply, inadequate technical expertise, inadequate ICT facilities, Poor staff training, inadequate finance, and lack of manpower.

### **Discussion of Findings**

The findings in respect of the types of LMS available and managed by private university libraries in Northern Nigeria by this study was revealed that, KOHA, Dspace, Newgenlib, and ConCos were the library management software for operation and services of their libraries. This finding is in line with the study of Bwalya, Akandelwa and Mwalimu (2019) which investigated the adoption footprints of KOHA among Higher Education Institutions in Zambia.

Findings as regards to the challenges associated with management of LMSs by this study revealed that the following challenges; erratic power supply, inadequate technical expertise, inadequate ICT facilities, Poor staff training, inadequate finance, and lack of manpower were revealed as the major



challenges. This finding is in line with the findings of Uzomba, Oyebola and Izuchukwu, (2015) in their study on the Use and Application of Open Source Integrated Library System in Academic Libraries in Nigeria and found that insufficient manpower, lack of supervision, inadequate managerial support, erratic power supply, cost of procurement of the hardware/software, maintenance cost, vendor's insincerity, lack of consortium, Apathy on the part of library staff, inadequate funding, lack of training and re-training of staff, compatibility with hardware devices, piracy, proximity to the virus, crashing problem and lack of technical knowledge from the staff. Similarly, Nok (2016) in his study the challenges of computerizing a university library in Nigeria, identified other challenges to include irregular electricity connections across Nigerian University Campuses militates against the effective deployment of library management software in Nigeria.

### **Conclusion**

Based on the findings of the study, it is therefore concluded that the librarians in private universities of Northern Nigeria mostly are impeded by challenges such as erratic power supply, inadequate technical expertise, inadequate ICT facilities, poor staff training, inadequate finance, and lack of manpower among others.

### **Recommendation**

Based on the findings, it was recommended that the Management of the private universities studied should provide the following:

1. There should be modern information and communication technologies gadgets linked with the internet facilities to enable librarians to have access to various facilities attached to the software.
2. Also, provide opportunities for the librarians and information professionals to attend workshops/conferences.
3. Adequate power backup facility should be provided to solve the problem of power outages in the library.
4. The library management should provide adequate funds for the purchase of modern ICT facilities in the library.

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