

## Extent of the Use of Library Management Software Packages in Selected University Libraries in South West Nigeria

Emeka C. UZOMBA(✉)

Federal University Oye-Ekiti, P.M.B. 373 Oye-Ekiti, Ekiti State, Nigeria

### Abstract

*This study investigated the extent of the use of library software packages in university library services in selected libraries in South West Nigeria. The study employed descriptive survey research design. Data were collected through questionnaire, oral interview and observation. The findings of the study revealed that KOHA, VIRTUA and SLAM are the three library software packages available in the libraries, and that the software packages are applied to a high extent; that the areas of library services and operation where these software packages are applied include circulation services, cataloguing and classification services, web based OPAC system, etc. The study concluded that the benefits of library software packages include provision of easy access to information resources in the library, improved efficiency of library services, etc.*

### Keywords

*Library software packages; Application software; University Libraries; Library services; Nigeria*

### Corresponding Author (✉)

[emeka.uzomba@fuoye.edu.ng](mailto:emeka.uzomba@fuoye.edu.ng),  
Federal University Oye-Ekiti P.M.B. 373  
Oye-Ekiti, Ekiti State, Nigeria,  
+2348036996747

© Nigeria Library Association Enugu  
State Chapter

### Introduction

It is now glaring that with the development of software packages in the library, access to information and retrieval has become more convenient and efficient. There is no doubt that library software packages have raised the standard of university libraries. It has created a revolution on the service role of libraries and has re-awakened the consciousness of librarians in the discharge of their duties. Omeluzor, Adara, Ezinwayi, Bamidele and Umahi (2012) stated that library software is designed to enhance all library routine activities as expected by the library users. Good and reliable library software enhances management, control and easy access to information resources that are physical in a library and outside.

Library software packages are computer software designed to perform and accomplish library functions. It is software that has been developed to handle basic housekeeping functions of a library. Muller (2011) stated that library software is multifunction, adaptable software

applications that allow libraries to manage, catalogue and circulate their materials to

patrons. It enables libraries perform the primary task of cataloguing, circulation, acquisition, reference and serials management functions in an efficient manner. University libraries have always engaged themselves with the collection, organization and dissemination of information resources to support teaching, learning and research. In order to carry out these responsibilities efficiently, there is need for the application of appropriate library software in its library operation that will meet the information requirements of the user community.

According to Ukachi (2012), the 21st century has ushered in a lot of changes in the way library and information services are carried out. Library profession is now at a crossroad as traditional library services appear to be on the decline while new technology-based services are on the rise as a result of the adoption of software in the management and service provision of libraries. Today, there are several software packages that have been

developed for the housekeeping functions of library. Edem (2016) states that there is a vast array of application software packages as a result of the assortment of tasks and functions executed using a computer system. Examples of such library software are: Micro CDS/ISIS, TINLIB, GLAS, ALICE for windows, X-LIB, INMAGIC, Virtual etc. He further stressed that software available for selection also includes foreign brands and indigenously developed brands.

Also, Uzomba, Akinyede and Ubogu (2021) provides list of prominent library software packages which includes, but not limited to TINLIB, Alexandria, Opals, Resource Mate, Evergreen, Greenstone, D-Space, Avanti, OpenBiblio, NewGenlib Koha, SLAM, CDS/ISIS, D-Space, GLASS, ALICE for windows, SLIM, X-LIB, Millennium, Aleph, Voyager, Polaris, LIBRARIAN, Fedora, Evergreen, Adlib Library, Aura Online, Bibliotheca, etc. These software packages enhance the speed, productivity and efficiency of the library services. Not only do the software packages make it easier to find books, but it also allows the library to be more flexible when it comes to any increases in demand.

Library software packages enhance management, control and easy access to information resources. This implies that university libraries should ensure adequate use of library software packages for effective service delivery. It has been observed in recent times that many Nigerian university libraries are shifting from traditional manual library services to a more advanced electronic – based system with the application of software packages. Many university libraries have automated all their services while some are at various stages of automation. Also, some have been confronted with inadequacies as regards the use of library software packages. The effectiveness of the system can only be measured by the extent to which the software packages are applied and used, which must be able to address the various

library operations especially the catalogue, acquisition, circulation, web based OPAC system, administrative management, library stock management and report generating systems etc.

This study was therefore, designed to investigate the extent of the use of software packages in selected university libraries in South West Nigeria.

### **Purpose of the Study**

The general purpose of this study is to investigate the extent of the use of software packages in selected university libraries in South West Nigeria. The specific objectives of the study are to:

1. Identify the library software packages in use in the selected university libraries in South West Nigeria.
2. Find out the areas of library services and operations where the software packages are used.
3. Determine the extent to which the library software packages are used in the areas.
4. Ascertain the benefits derived from the use of library software packages in the libraries.

### **Literature Review**

Software is a collection of computer programs and related data that provide the instructions to a computer. It also refers to one or more computer programs and data held in the storage of computer for some purpose. In this study, software is a set of detailed and coded instructions that control the operations of a computer system. Library software packages are therefore set of detailed, designed, and coded machine readable instructions that enable a computer to carry out effective library and information services or operations. It is software that has been developed to handle basic housekeeping functions of a library. This common application software is tied together

with data residing in common databases (as much as possible) that are related to many different tasks. Muller (2011) stated that library software (ILS) is multifunction, adaptable software applications that allow libraries to manage, catalogue and circulate their materials to patrons. It enables libraries perform the primary task of cataloguing, circulation, acquisition, reference and serials management functions in an efficient manner.

Omeluzor et al. (2012b) opined that library software is designed to enhance all library routine activities as expected by the library users. They are computer software packages designed to perform and accomplish library functions.

It is now glaring that automation projects are now taking over the housekeeping duties of acquisition, processing, charging and discharging of books in libraries. At the early period of the organization of books, the materials were listed in books. This was the era of the book catalogue. The problem of the catalogue is that it is not suitable to situation of large collections like university library collections. The card catalogue that came later was an improvement over the book catalogue. The card catalogue can be easily updated with cards inserted in the catalogue in their alphabetical sequence while weeded cards can be easily pulled out. It can be kept accurate and be made accessible to any users. In addition, it fits perfectly well into situations of large collections. However, some defects discovered in the use of the card catalogue have led to the emergence of the computerized catalogue. The computerized catalogue is flexible, fast and has the ability to be updated and manipulated in the desired form the information is required. There are lots of advantages in the computerized catalogue. Most importantly, the catalogue can be accessed from the office, if it is networked and even at home if it is web-based (Ibrahim, 2012). However, the

advent of computer software as a product of Information and Communication Technology (ICT) makes it easy to automate library operations, thereby facilitating students and staff in higher institutions in their search for information and carrying out research in their respective fields. Today, software has been developed for the housekeeping functions of circulation, acquisition, cataloguing, serial processing, web based OPAC system, library stock management, etc in the library.

Library software automates many library tasks that would otherwise be repetitive, labour intensive, and inefficient. The acquisition and maintenance of library software is a major investment for a library. With the development of library software packages, access to information and retrieval has become more convenient and efficient. Yamuna (2022) argued that library automation software packages are very important to operating library activities such as acquisition, cataloguing, circulation, reference, serial control etc. Web-based catalogues expose the resources of the library to the outside world well beyond the reach of a consortium; such libraries can also view the resources of other libraries (Ibrahim, 2012b). It helps take some of the workload off librarians and other staff members in the areas of acquisitions, cataloguing and circulation, which in turn allows them to better serve their patrons. This extra time can lead to more programs being facilitated in the library and make library staff available to answer reference questions and help people who are having trouble researching or finding the right information.

Ayodele (2015) stressed that library application software no doubt offers information managers many opportunities to improve library services to their client. It makes information resources easier to be located and retrieved. Also, 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.

The purpose of introducing software packages in libraries is to create opportunities for students and researchers to access available information resources through various search options such as title, author, subject, ISBN, series, call numbers, etc. This will facilitate ease of access to information materials in the library and beyond. Library software is one of the major resources in the library management (Ukachi, 2012). However, what determines the choice of software is the relevance, user-friendliness, adaptability, inter-operability, general efficiency, amongst other considerations (Ukachi, Nwachukwu and Onuoha, 2014).

Library software packages provides centralized management and processes for different types of libraries and library activities such as acquisition, cataloguing, circulation, administration, reporting and patron records.

### Methodology

The study adopted descriptive survey research design. The population of the study consists of all the university libraries in South West Zone of Nigeria. There are thirty-six university libraries including federal, state and private in the six states of the South West zone of Nigeria. The sample size for this study consists of ninety (90) representing forty-five (45) librarians, forty (40) library officers and five (5) systems analysts from three university libraries. This was determined using purposive sampling technique to select three university libraries. These include: Kenneth Dike Library of the University of Ibadan (federal), twenty-seven (27) librarians, twenty-six (26) library officers and two (2) systems analysts; Ekiti State University Library (state), ten (10) librarians, seven (7) library officers and two (2) systems analysts; and Timothy Olagbemiro Library of

the Bowen University (private), eight (8) librarians, nine (7) library officers and one (1) system analyst. The choice of these university libraries were justified being libraries that provides innovative access to information through the use of library software packages. The instrument for data collection in this study was questionnaire and observation checklist.

The data collected for this study was analyzed in line with the research questions. The data was collected from questionnaire and observation checklist and were presented in tabular form and analyzed with the use of percentage, frequencies and mean. Frequencies and percentages were used to calculate items in cluster one (1) and two (2), while the four point rating scales which required the values VHE=Very High Extent, HE=High Extent, LE=Low Extent, NA=Not At All and SA= Strongly Agree, A=Agree, SD=Strongly Disagree, D=Disagree was used for calculating the mean result of items in clusters 3 and 4 respectively. On a four point rating scale, the cut-off point was obtained by adding up the values (all the scores) in the scale and dividing it by the number of scores.

$$\text{E.g. } \frac{1+2+3+4}{4} = \frac{10}{4} = 2.5$$

Any item ranked from 2.5 and above was accepted and considered useful whereas any one ranked below 2.5 was regarded as not accepted and was not used. For research question 3, the real limit of number was used in taking decision as follows:

- 3.50 – 4.00 - VHE
- 2.50 – 3.49 - HE
- 1.50 – 2.49 - LE
- 0.50 – 1.49 - NA

A total number of ninety copies of questionnaire were given out and eighty copies which represent 88.8% were returned and found usable. Relevant data were also collected through observation checklist to

find out the availability of library software packages in the libraries under study.

### Research Question 1:

What are the library software packages available in these libraries?

In view of the above research question, respondents were required to identify library software packages available in their libraries. Their responses were collected through personal observation and questionnaire and analyzed below.

**Table 1a: Library Software Packages Available for University Libraries (Observation Checklist)**

| S/NO | Software          | Available | Not Available |
|------|-------------------|-----------|---------------|
| 1    | KOHA              | ✓         | -             |
| 2    | Dspace            | -         | ✓             |
| 3    | SLIM              | ✓         | -             |
| 4    | X-Lib             | -         | ✓             |
| 5    | TINLIB            | -         | ✓             |
| 6    | NewGenlib         | -         | ✓             |
| 7    | Alice for Windows | -         | ✓             |
| 8    | Micro CDS/ISIS    | -         | ✓             |
| 9    | Virtua            | ✓         | -             |
| 10   | GLAS              | -         | ✓             |
| 11   | Greenstone        | -         | ✓             |
| 12   | Alexandria        | -         | ✓             |
| 13   | SLAM              | -         | ✓             |
| 14   | Millennium        | -         | ✓             |
| 15   | OpenBiblio        | -         | ✓             |

Data collected through observation checklist from the three university libraries revealed that KOHA, SLIM and VIRTUA are available, while Dspace, X-LIB, TINLIB, NewGenlib, Alice

for windows, Micro CDS/ISIS, GLAS, Greenstone, Alexandria, SLAM, Millennium and OpenBiblio are not available.

**Table 1b: Library Software Packages Available in the University Libraries (Questionnaire)**

| S/N | Items             | University of Ibadan |      |    |       | Ekiti State University |      |    |       | Bowen University |     |    |      |
|-----|-------------------|----------------------|------|----|-------|------------------------|------|----|-------|------------------|-----|----|------|
|     |                   | A                    | %    | NA | %     | A                      | %    | NA | %     | A                | %   | NA | %    |
| 1   | KOHA              | -                    | -    | 48 | 100   | -                      | -    | 17 | 100   | 15               | 100 | -  | -    |
| 2   | Dspace            | 12                   | 25   | 36 | 75    | 3                      | 17.6 | 14 | 82.4  | 1                | 6.7 | 14 | 93.3 |
| 3   | SLIM              | -                    | -    | 48 | 100   | 17                     | 100  | -  | -     | -                | -   | 15 | 100  |
| 4   | X-Lib             | 1                    | 2.1  | 47 | 97.9  | -                      | -    | 17 | 100   | -                | -   | 15 | 100  |
| 5   | TINLIB            | 3                    | 6.25 | 45 | 93.75 | 1                      | 5.9  | 16 | 94.1  | -                | -   | 15 | 100  |
| 6   | NewGenlib         | 1                    | 2.1  | 47 | 97.75 | -                      | -    | 17 | 100   | -                | -   | 15 | 100  |
| 7   | Alice for Windows | 3                    | 6.25 | 45 | 93.75 | -                      | -    | 17 | 100   | -                | -   | 15 | 100  |
| 8   | Micro CDS/ISIS    | 2                    | 4.2  | 46 | 95.8  | 2                      | 4.2  | 46 | 95.8  | -                | -   | 15 | 100  |
| 9   | Virtua            | 48                   | 100  | -  | -     | -                      | -    | 17 | 100   | -                | -   | 15 | 100  |
| 10  | GLAS              | 1                    | 2.1  | 47 | 97.75 | -                      | -    | 17 | 100   | -                | -   | 15 | 100  |
| 11  | Greenstone        | 1                    | 2.1  | 47 | 97.75 | 1                      | 5.9  | 16 | 94.1  | -                | -   | 15 | 100  |
| 12  | Alexandria        | 1                    | 2.1  | 47 | 97.75 | 1                      | 2.1  | 47 | 97.75 | -                | -   | 15 | 100  |
| 13  | SLAM              | 1                    | 2.1  | 47 | 97.75 | -                      | -    | 17 | 100   | -                | -   | 15 | 100  |
| 14  | Millennium        | 1                    | 2.1  | 47 | 97.75 | -                      | -    | 17 | 100   | -                | -   | 15 | 100  |
| 15  | OpenBiblio        | 1                    | 2.1  | 47 | 97.75 | 1                      | 5.9  | 16 | 94.1  | 1                | 6.7 | 14 | 93.3 |

Data collected from Kenneth Dike Library of University of Ibadan through questionnaire revealed that VIRTUA with percentage rating

100% is available, while KOHA, SLIM, GLAS, Greenstone, Alexandria, SLAM, Millennium,

OpenBiblio, X-Lib, Micro CDS/ISIS, Alice for Windows, TINLIB and Dspace with percentage ratings 100%, 100%, 97.75%, 97.75%, 97.75%, 97.75%, 97.75%, 97.75%, 95.8, 93.75%, 93.75% and 75% are indicated as the software packages that are not available.

Also, data collected from Ekiti State University library through questionnaire showed that SLIM with percentage rating of 100% is the software that is available, while KOHA, X-Lib, NewGenlib, Alice for Windows, VIRTUA, GLAS, SLAM, Millennium, Alexandria, Micro CDS/ISIS, TINLIB, Greenstone, OpenBiblio and Dspace 100%, 100%, 100%, 100%, 100%, 100%, 100%, 97.75%, 95.8%, 94.1%, 94.1%, 94.1% 82.4% ratings are indicated as software packages that are not available.

Data from Timothy Olagbemiro Library of the Bowen University, Iwo through questionnaire indicated that KOHA with percentage rating 100% is the software that is available, while

SLIM, X-Lib, TINLIB, NewGenlib, Alice for Windows, Micro CDS/ISIS, VIRTUA, GLAS, Greenstone, Alexandria, SLAM, Millennium, OpenBiblio and Dspace with 100%, 100%, 100%, 100%, 100%, 100%, 100%, 100%, 100%, 100%, 93.3% and 93.3% ratings are revealed as software packages that are available.

Therefore, the summary of cluster one could be given that the library software packages available in the libraries under study are VIRTUA, SLIM and KOHA.

### Research Question 2

What are the areas of library services and operations where the library software packages are applied in the libraries?

Research question two seeks to find out the areas of services and operations where the library software packages are applied in the libraries. Data collected from observation checklist are analyzed below.

**Table 2a: Areas of library services and operations where the library software packages are applied in the libraries (Observation Checklist)**

| S/NO | Software                                                                                                                                                    | Applied | Not Applied |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------|
| 1    | Circulation services such as charging and discharging, registration of users, book reservation, E-mail and/or text patron's overdue and other notices, etc. | ✓       | -           |
| 2    | Cataloguing and classification services                                                                                                                     | ✓       | -           |
| 3    | Generation of barcodes/accession numbers                                                                                                                    | ✓       | -           |
| 4    | Administrative management                                                                                                                                   | ✓       | -           |
| 5    | Library stock management                                                                                                                                    | ✓       | -           |
| 6    | Reference services                                                                                                                                          | ✓       | -           |
| 7    | Ordering and acquisition of library materials                                                                                                               | ✓       | -           |
| 8    | Web based OPAC system                                                                                                                                       | ✓       | -           |
| 9    | Serials control and management                                                                                                                              | ✓       | -           |

In table 2a above, it was observed that the three available library software packages in the universities (VIRTUA, SLIM and KOHA) are applied in all the areas of library services and operations mentioned above. These includes circulation services, cataloguing and

classification services, generation of barcodes/accession numbers, administrative management, library stock management, reference services, ordering and acquisition of library materials, web based OPAC system and serials control and management.

**Table 2b: Areas of library services and operations where the library software packages are applied in the libraries (Questionnaire)**

| S/NO | Items                                                                                                                                                       | Applied |       | Not Applied |       |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------|-------------|-------|
|      |                                                                                                                                                             | Freq    | %     | Freq        | %     |
| 1    | Circulation services such as charging and discharging, registration of users, book reservation, E-mail and/or text patron's overdue and other notices, etc. | 79      | 98.75 | 1           | 1.25  |
| 2    | Cataloguing and classification services                                                                                                                     | 79      | 98.75 | 1           | 1.25  |
| 3    | Generation of barcodes/accession numbers                                                                                                                    | 56      | 70.00 | 24          | 30.00 |
| 4    | Administrative management                                                                                                                                   | 57      | 71.25 | 23          | 28.75 |
| 5    | Library stock management                                                                                                                                    | 54      | 67.50 | 26          | 32.50 |
| 6    | Reference services                                                                                                                                          | 47      | 58.75 | 33          | 41.25 |
| 7    | Ordering and acquisition of library materials                                                                                                               | 67      | 83.75 | 13          | 16.25 |
| 8    | Web based OPAC system                                                                                                                                       | 73      | 91.25 | 7           | 8.75  |
| 9    | Serials control and management                                                                                                                              | 63      | 78.75 | 17          | 21.25 |
| 10   | Creation of staff username and passwords                                                                                                                    | 63      | 78.75 | 17          | 21.25 |
| 11   | Organizing training for library staff                                                                                                                       | 61      | 76.25 | 19          | 23.75 |

In table 2b above, the data collected through questionnaire revealed that the three available library software packages in the universities (VIRTUA, SLIM and KOHA) are applied in all the areas of library services and operations. This is indicated in the percentage ratings of 98.75% for circulation services, 98.75% for cataloguing and classification services, 91.25% for web based OPAC system, 83.75% for ordering and acquisition of library materials, 78.75% for serials control and management, 71.25% for administrative management, 70% for

generation of barcodes/accession numbers, 67.5% for library stock management and 58.75% for reference services.

### Research Question 3

To what extent are the library software packages being applied in the areas?

Research question four seeks to find out the extent to which library software packages are being applied in the areas of library services and operations.

**Table 3: Extent to which library software packages are applied in the areas (Questionnaire)**

| S/NO                | Items                                                                                                                                                      | VHE | HE  | LE | NA | $\bar{X}$ | Rank            | Decision |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|----|----|-----------|-----------------|----------|
| 1                   | Cataloguing and classification services                                                                                                                    | 69  | 8   | 2  | 1  | 3.81      | 1 <sup>st</sup> | VHE      |
| 2                   | Circulation services such as charging and discharging, registration of users book reservation, E-mail and/or text patron's overdue and other notices, etc. | 67  | 10  | 2  | 1  | 3.78      | 2 <sup>nd</sup> | VHE      |
| 3                   | Web based OPAC system                                                                                                                                      | 43  | 28  | 6  | 3  | 3.38      | 3 <sup>rd</sup> | HE       |
| 4                   | Ordering and acquisition of library material                                                                                                               | 32  | 30  | 10 | 8  | 3.07      | 4 <sup>th</sup> | HE       |
| 5                   | Serials control and management                                                                                                                             | 20  | 43  | 7  | 10 | 2.91      | 5 <sup>th</sup> | HE       |
| 6                   | Generation of barcodes/accession numbers                                                                                                                   | 15  | 33  | 7  | 14 | 2.63      | 6 <sup>th</sup> | HE       |
| 7                   | Library stock management                                                                                                                                   | 19  | 28  | 17 | 16 | 2.62      | 7 <sup>th</sup> | HE       |
| 8                   | Administrative management                                                                                                                                  | 13  | 33  | 20 | 14 | 2.56      | 8 <sup>th</sup> | HE       |
| <b>Overall Mean</b> |                                                                                                                                                            | 297 | 235 | 99 | 89 | 3.02      |                 | HE       |

KEY: VHE=Very High Extent HE=High Extent LE=Low Extent NA=Not At All  $\bar{X}$  = Mean

From the results presented in the above table, it is evident that cataloguing and classification and circulation services got the mean of 3.8 and 3.78 which means that the software packages are applied to a **very high extent** in this area. However, the software

packages are applied to a **high extent** in the areas of web based OPAC system with mean score of 3.38, ordering and acquisition of library materials with mean score of 3.07, Serials control and management with mean score of 2.91, Generation of

barcodes/accession number with mean score of 2.63, Library stock management with mean score of 2.62 and administrative management with the mean score of 2.56. However, reference services got the lowest mean of 2.45. This showed that the software packages are not applied at all in this area.

Therefore, it can be deduced from the above analysis that the software packages are applied to a **high extent** in the areas of library services and operations mentioned above.

This can be evident in the overall mean of 2.98.

#### Research Question 4

What are the benefits of library software packages in the libraries?

Research question two seeks to find out the benefits of library software packages in the libraries.

**Table 4: Benefits of library software packages in the libraries (Questionnaire)**

| S/NO | Items                                                                                                                         | SA  | A   | D  | SD | $\bar{X}$ | Rank             | Decision |
|------|-------------------------------------------------------------------------------------------------------------------------------|-----|-----|----|----|-----------|------------------|----------|
| 1    | It provides easy access to information resources in the library                                                               | 73  | 7   |    |    | 3.9       | 1 <sup>st</sup>  | Accepted |
| 2    | It helps for improved efficiency of library services.                                                                         | 68  | 12  | -  | -  | 3.85      | 2 <sup>nd</sup>  | Accepted |
| 3    | It provides easy access to web based online public access catalogue (OPAC)                                                    | 61  | 18  | 1  | -  | 3.75      | 3rd              | Accepted |
| 4    | It guarantees easy generation of records in the library                                                                       | 58  | 22  | -  | -  | 3.73      | 4th              | Accepted |
| 5    | It reduces time wastage in the delivery of services to the library users.                                                     | 59  | 21  | -  | -  | 3.72      | 5 <sup>th</sup>  | Accepted |
| 6    | It allows for easy cataloguing of books and other information resources in the library                                        | 61  | 17  | -  | 2  | 3.71      | 6 <sup>th</sup>  | Accepted |
| 7    | It supports basic and advanced searching using keywords such as author, title, subject, ISBN, control number, etc.            | 41  | 37  | 2  | -  | 3.48      | 7 <sup>th</sup>  | Accepted |
| 8    | It provides effective security measure to protect unauthorized person from accessing the system (E.g. username and passwords) | 35  | 40  | 4  | 1  | 3.36      | 8 <sup>th</sup>  | Accepted |
|      | It provides easy integration of library services such as circulation, cataloguing, acquisition,                               | 33  | 41  | 4  | 2  | 3.31      | 9th              | Accepted |
|      | It helps for library stock management serials management, etc.                                                                | 28  | 36  | 11 | 5  | 3.08      | 10 <sup>th</sup> | Accepted |
|      | <b>Overall Mean</b>                                                                                                           | 517 | 251 | 22 | 10 | 3.5       |                  | Accepted |

The result presented in table 4 above on the benefits of library software packages showed an overall mean of 3.5 which were accepted. It is evident that all the benefits mentioned above were accepted by the respondents as indicated in the mean scores of 3.9, 3.85, 3.75, 3.73, 3.72, 3.71, 3.48, 3.36, 3.31 and 3.08 for provision of easy access to information resources in the library, improved efficiency of library services, provision of easy access to web based online public access catalogue (OPAC), easy generation of records in the library, reduces

time wastage in the delivery of services to the library users, easy cataloguing of books and other information resources in the library, support for basic and advanced searching using keywords such as author, title, subject, ISBN, control number, provision of effective security measure to protect persons from accessing the system (E.g. username and passwords), provision of easy integration of library services such as circulation, cataloguing, acquisition, serials management and library stock management respectively.

## Conclusion

This study investigated the extent of the use of software packages in selected university libraries in South West Nigeria. The study which was guided by four research questions basically investigated the library software packages available in these libraries, areas of library services and operations where the library software packages are applied in the libraries, extent to which library software packages are applied in the areas and benefits of library software packages in libraries. The instrument for data collection was questionnaire, interviews and observation checklist. The research design was descriptive survey research design with a population of (90) representing forty-five (45) librarians, forty (40) library officers and five (5) systems analysts from three university libraries. Data collected through oral interviews were analyzed in narrative form while data from questionnaire and observation checklist were presented in tabular form and analyzed with the use of percentage, frequencies and mean.

The findings of the study revealed that the library software packages available in the libraries are VIRTUA, SLIM and KOHA; the areas of library services and operation where these software packages are applied include circulation services, cataloguing and classification services, web based OPAC system, ordering and acquisition of library materials, serials control and management, creation of staff username and passwords, organizing training for library staff, administrative management, generation of barcodes/accession numbers, library stock management and reference services. On this, Omeluzor et al. (2012c) agreed that library software is designed to enhance all library routine activities as expected by the library users. The integration of the software packages into these areas will enable libraries perform the primary task of cataloguing, circulation, acquisition, reference and serials management functions in an efficient

manner. The study also revealed that the library software packages are applied to a high extent on these areas. This will facilitate easy access to information resources in the library. The benefits of library software packages as revealed by the study includes provision of easy access to information resources in the library, improved efficiency of library services, provision of easy access to web based online public access catalogue (OPAC), easy generation of records in the library, reduction of time in the delivery of services to the library users, among others. It has also led to the emergence of web-based catalogues. Web-based catalogues expose the resources of the library to the outside world well beyond the reach of a consortium; such libraries can also view the resources of other libraries (Ibrahim, 2012). Good and reliable library software enhances management, control and easy access to information resources.

Therefore, adequate availability of software packages in libraries is needed for libraries to provide efficient and effective services to their patrons.

## Acknowledgements

The researcher is highly indebted to Dr. O. K. Opele and Dr. O. A. Odunola both from the Department of Library and Information Science, Federal University Oye-Ekiti, for their meticulous guide during the course of writing this research work.

The researcher's appreciation also goes to his research assistants for their assistance in the distribution and collection of the instruments for data collection.

Finally, the researcher owes so much to Dr. Gboyega Adio – The immediate past University Librarian, Federal University Oye-Ekiti for his immeasurable moral support which to a great extent gave room for the attainment of this work.

## References

- Ayodele, Rachael (2015). Assessment of library application software packages for library operations and services in Federal University libraries in North Western States of Nigeria. *Unpublished Master's Thesis, University of Nigeria, Nsukka.*
- Breeding, M. (2012). Open Source Integrated Library Systems. *ALA Tech Source*. Retrieved from <http://www.alatechsource.org/ltr/open-source-integrated-library-systems>.
- Edem, Margaret B. (2016). "Adoption of Software Packages in University Libraries in Nigeria". *Library Philosophy and Practice (e-journal)*. 1342. <http://digitalcommons.unl.edu/libphilprac/1342>
- Ibrahim, A. A. (2012). The Challenges and Frustration of Software Adoption in Nigeria Libraries: a survey of some selected libraries. *Library Philosophy and Practice (e-journal)* paper 856
- Kari, H. K. and Baro, E. E. (2014). The use of library software in Nigerian University Libraries and challenges. *Library Hi Tech News*. DOI: 10.1108/LHTN-09-2013-0053
- Muller, T. (2011). How to Choose an Free and Open Source Integrated Library System. *International digital library perspectives*. 27(1): 57-78. [www.emeraldinsight.com/1065-075X.htm](http://www.emeraldinsight.com/1065-075X.htm)
- Ola, C. O. (2010). The deployment of VIRTUA Integrated Library System Software for Managing Library Resources in University of Ibadan, *KDL News, A Bi-Annual Publication of Kenneth Dike Library, University of Ibadan, Nigeria*, 14-15.
- Omeluzor, et al. (2012). Implementation of Koha Integrated Library Management Software (ILMS): The Babcock University Experience. *Canadian Social Science*, 8(4), 211-221
- Ukachi, N. B. (2012). Awareness, Availability and Utilization of Open Source Software in Nigerian Libraries: the way forward. *International Research Journal of Library, Information and Archival Studies*, 2 (1), 001-009. Available: <http://interesjournals.org/IRJLIAS/Contents/2012%20content/January.htm>. Retrieved on 27 September, 2015.
- Ukachi, N.B., Nwachukwu V.N. and Onuoha, U. D. (2014). Library Automation and Use of Open Source Software to Maximize Library Effectiveness. *Information and Knowledge Management*, 3(4), 74-82
- Yamuna, Voggu (2022). Library Automation Software Packages and Types. *International Journal of Multi-disciplinary Educational Research* 11(4)