

Performance Expectancy as a Determinant of use of Koha Integrated Library Software in Public University Libraries in South-West Nigeria

Oladele Denis OMODARA(Ph.D)¹, James Adedeji AJAYI(Ph.D)²
&
Thomas Aanu OJO³

^{1,2}Department of Educational Technology, Bamidele Olumilua University of Education, Science and Technology, Ikere-Ekiti, Ekiti State, Nigeria.

³University Library, Bamidele Olumilua University of Education, Science and Technology, Ikere-Ekiti, Ekiti State, Nigeria.

¹E-Mail: omodara.oladele@bouesti.edu.ng , Phone No: +2348161699347

²E-Mail: ajayi.james@bouesti.edu.ng , Phone No: +2348033667745

³E-Mail: ojo.thomas@bouesti.edu.ng , Phone No: +2348133015907

Abstract

Koha is an open-source integrated library software (ILS) used for managing all library functions. However, it is observed that university libraries in the southwest of Nigeria have not fully utilised it for the provision of library services. Therefore, this study examined the performance expectancy as a determinant of use of Koha ILS in public university libraries in South-West, Nigeria. The Technology Acceptance Model(TAM) provided the framework. The survey design of the correlational type was adopted. Twelve public universities in the six states in Southwest, Nigeria were used in this study. All the 264 library personnel were enumerated. Performance expectancy and use of Koha ILS with reliability coefficients ($\alpha = 0.851$) and ($\alpha = 0.787$) was the instrument developed and used for data collection. Data collected were analysed using descriptive statistics and Pearson correlation at 0.05 level of significance. Koha ILS was used to search online catalogues and register library patrons among others. The level of performance expectancy of library personnel in using Koha ILS was very high. There was a significant and positive correlation between the use of Koha ILS and performance expectancy. The study suggests that performance expectancy significantly influences the use of Koha ILS in South-West Nigerian public university libraries. It recommends that universities and library management should improve and sustain the high level of performance expectancy of library staff to use Koha ILS to perform library operations.

Keywords: Koha Integrated Library Software, Performance expectancy, University Libraries, South west, Nigeria.

Introduction

Technology plays an indispensable role in the management of university libraries, streamlining routine tasks and offering search services to users. The adoption of this new technology has effectively transformed university libraries into virtual environments, necessitating that library staff possess proficient technological capabilities. In the twenty-first century, university libraries are expected to harness technology to efficiently disseminate information to their users. The importance of technology across various facets of university library operations, including acquisition, cataloguing, circulation, and serials management, is indisputable. To meet the evolving demands of library users and adapt to the shifting landscape of information management, university libraries must now incorporate open-source software to enhance the quality of their services.

Open-source software (OSS), is a computer of software with a free source code that is made available to libraries for use, modification, and distribution. It has a significant impact on the technology industry, powering many web servers, mobile devices, and other critical infrastructures. It plays a vital role in fostering collaboration, innovation and the democratization of technology. According to Haneefa, Divya & Lakshmi (2022), open-source software allows libraries to have more control over their working environment, encourages collaboration, ensures transparency, helps libraries maintain control of their digital infrastructure, eliminates the need for the upfront costs associated with proprietary software, and empowers libraries to provide better services.

The rapid evolution of technology has raised the bar for library services, driving modern libraries to rely on Integrated Library Software (ILS) for effective management. Integrated Library Software (ILS) is a comprehensive suite of software designed to manage and automate various tasks and processes within a library. It functions as an integrated software solution encompassing modules for circulation, serials, acquisition, cataloguing, and OPAC, addressing a multitude of library functions and enhancing the efficiency of university libraries by providing access to its resources and holdings.

Several open-source integrated-library software, including Evergreen, Dspace, Eprint, Fedora, OPALS (Open-Source Automated Library System), Greenstone, OpenBiblio, Invenio, PMB (PhpMyBibli), CodeAchi, Polaris, NewGenLib, Librarian, BiblioteQ, and Koha, have made significant inroads into Nigerian libraries. Koha is the most popular and widely used among several open-source library-integrated software worldwide. Khan (2020) stated that Koha Integrated Library Software (ILS) stands out as a significant breakthrough, offering numerous advantages such as cost-effectiveness, coding flexibility, and shared responsibility for system regulations. It provides librarians with an inexpensive and excellent substitute for commercial ILS. Koha is an Open-Source Integrated Library Software embraced by public, school, and academic libraries worldwide. Its development is steered by a burgeoning community of libraries and users, collaborating to realise technological objectives. Omuluzor, Adara, Ezinwayi, Bamidele & Umahi (2019) observed that Koha ILS transcends being merely an Online Public Access Catalogue (OPAC); it constitutes a fully integrated library system replete with modules catering to acquisition, cataloguing, circulation, and serials management, addressing a multitude of library functions.

The likelihood that library personnel to accept and make good use of Koha ILS if they believe it is an important tool that improves their productivity and the quality of services they offer will be high. Performance expectancy is one of the key factors that influence an individual's decision to use Koha ILS. It refers to the perceived ability of the Koha ILS to help library personnel achieve their goals or perform specific tasks effectively and efficiently. Performance expectancy serves as a pivotal factor shaping the acceptance and utilisation of technology, as delineated in the Unified Theory of Acceptance and Use of Technology

(UTAUT) model aims to explain and predict the adoption of new technologies and behaviours. This construct according to Wu, Yu & Weng (2012) is chiefly influenced by factors such as perceived usefulness, extrinsic motivation, job/task fit, relative advantage, and outcome expectations of information technology. These indicators mould an individual's perception of how technology facilitates their work.

Within the context of libraries, performance expectancy plays a crucial role in determining the adoption and effective utilisation of an ILS like Koha. Users' perception of how effective and efficient Koha ILS is in helping them accomplish their goals and tasks assumes a substantial role. This perception is contingent upon whether Koha ILS is perceived as intuitive and user-friendly, whether it effectively manages library operations and caters to users' needs, whether it operates without frequent errors or disruptions, whether it facilitates a seamless workflow, whether it aligns with the specific needs and work-flow of the library, and whether regular updates, bug fixes, and responsive customer support contribute to a positive perception of its features and effective utilisation. Performance expectancy suggests that when individuals perceive the high-performance benefits of Koha ILS, they are more likely to accept and use it. However, users may opt not to utilise Koha ILS if they doubt its ability to adequately address their objectives and tasks. Therefore, this study will delve into performance expectancy, with a focus on the level of performance expectancy among library personnel in the utilisation of Koha ILS for library operations in public university libraries in South-West, Nigeria.

Statement of the Problem

Koha ILS is a crucial tool in the dynamic library environment designed to manage a library's housekeeping tasks and deliver library services to users. However, preliminary investigation and observation have shown that Koha ILS use for library operations among public university libraries in South-West, Nigeria is very low. Previous studies have identified factors such as inadequate training and retraining, network problems, and high cost of ICT facilities to mention but few as responsible for the decline in the utilization of Koha for library operations with no attention paid to performance expectancy. This study, therefore examined performance expectancy as a correlate of use of Koha ILS in public university libraries in South-West, Nigeria.

Objectives of the Study

The broad objective of the study was to examine performance expectancy as a determinant of use of Koha ILS in public university libraries in South-West, Nigeria. The specific objectives were to find out the purpose of using Koha ILS, determine the level of performance expectancy of library personnel in the use of Koha ILS and determine the relationship between performance expectancy and the use of Koha ILS in public university libraries in South-West, Nigeria.

Research Questions

The following research questions guided the study:

1. What are the purposes of using Koha ILS in public university libraries in South-West, Nigeria?
2. What is the level of performance expectancy of library personnel in using Koha ILS in public university libraries in South-West, Nigeria?

Hypothesis

The null hypothesis was formulated for the study and tested at a 0.05 level of significance:

H₀1: There is no significant relationship between performance expectancy and the use of Koha ILS in public university libraries in South-West, Nigeria.

Literature Review

Use of Koha ILS in Public University Libraries

Koha is an open-source ILS that is widely used in public university libraries to manage their collections and provide essential library services. Tella and Olajide (2020) investigated the influence of Koha ILS on library services and the findings indicated that Koha had a favourable influence on the libraries studied. Ojedokun et al. (2021) found that Koha ILS improved the technological procedures and services provided by Bowen University Library.

Otunla et al. (2022) surveyed to assess the utilization of Koha ILS across Nigeria's six geopolitical zones. The findings revealed that libraries in Nigeria frequently used the cataloguing, OPAC, and circulation modules, whereas the serials and acquisition modules were less commonly used. Sobalaje et al. (2019) investigated the usage of Koha and found that Koha was used for users' registration, book cataloguing, circulation of books, barcode printing, and access to web-based OPAC systems among others. Chukwueke (2022) investigated the utilization of Koha ILS and the findings indicated that the OPAC, circulation, and cataloguing modules were used for record addition, search queries, metadata creation, user registration, and item tracking. Jamogha et al. (2022) investigated the operational Koha modules and their purposes. The study found that acquisition, cataloguing, circulation, and serials modules were functioning and used for making payments and placing orders for book and serials purchases.

Performance Expectancy in the Use of Koha ILS in Public University Libraries

Performance expectancy is a strong moderator that predicts the use of technology (Davis et al., 1992). Park et al. (2019) investigated the factors prompting the acceptance of digital libraries. The findings revealed that the perceived ease of use influences the perceived usefulness of digital libraries. Sun et al. (2018) emphasized that users who recognize a positive connection between the use of technology and performance are more likely to use the software. Alikoba et al. (2019) findings indicated that factors like system efficiency and ease of use influenced the utilisation of Koha. Akanni & Adetimirin (2020) investigated performance expectancy as a factor influencing the utilisation of open-access resources. The results indicated that a relative advantage enables the users to utilise open-access resources to a high level.

Abduljalil & Zainuddin's (2021) findings indicated that extrinsic motivation eloquently influenced users' attitudes and their willingness to adopt the accounting information system. Mairura's study revealed that the benefit of one technology over another was a major factor influencing technology utilisation. Mairura's study revealed that the benefit of one technology over another was a major factor influencing technology utilisation. Gholami et al. (2019) explored the factors influencing the adoption of mobile technology-based services by academic librarians. Their findings highlighted that perceived usefulness, compatibility, and relative advantage were factors that influenced the adoption of technology-based library services among academic librarians. Alyoubi & Yamin (2019) researched the factors impacting employee intention to adopt information technology. They found that technology fit significantly influenced employees' intentions to adopt the technology.

Performance Expectancy and Use of Koha ILS in Public University Libraries

Performance expectancy, one of the main factors in the context of the technology acceptance model, has a big impact on how the Koha is utilised in university libraries. Many studies, particularly Koha ILS, have examined the association between performance expectations and technology adoption. Mohideen's (2021) findings revealed that performance expectancy

influences the use of Koha. Ijeh et al. (2022) results unveiled that performance expectancy influences the use of cloud computing technologies by librarians. Otubelu & Anunob's (2020) findings indicated that performance expectancy influences the use of open-access publications.

Khan (2020) discovered that librarians' perceived usefulness predicts their intention to use Koha. Jamogha et al. (2022) findings disclosed that perceived usefulness influenced the use of Koha. Mayayise's (2021) study revealed that performance expectancy impacts the use of software in South Africa. Alraja et al. (2019) results showed that performance expectancy influences employees' intention to use electronic government services. Commer et al. (2018) examined the influence of performance expectancy on the intention to adopt technology-driven commerce, particularly among consumers and their findings indicated that performance expectancy significantly influenced the behavioural intention to adopt this technology.

Theoretical Framework

This study used the Technology Acceptance Model (TAM) of Davis in 1989 to investigate technology adoption focusing on performance expectancy. It is a theory employed to explain and understand users' acceptance of information technology and to assess performance expectancy. This theory specifically investigates technology use, a process influenced by the perceived usefulness and perceived ease of use, which are critical factors influencing individuals to use technology such as Koha ILS which in turn affects the actual usage behaviour. The theory is particularly fitting for this research because it provides a structured framework to understand library personnel's behaviour towards using the Koha ILS, which then shapes their behavioural intention to use it for library operations.

Methodology

This study employed a survey research design of a correlational type. In correlation research, data are collected to determine whether or not and to what degree a relationship exists between two or more variables. The design is appropriate according to Peretomode, Peretomode and Ibe (2020), it is used to study statistical relationships between the two variables. The population of this study comprised two hundred and sixty-four (264) library personnel (professional librarians and para-professionals) in twelve (12) public university libraries where the Koha ILS is used in South-West, Nigeria. This study adopted the total enumeration of two hundred and sixty-four (264) professional librarians and para-professionals in twelve public university libraries in Southwest, Nigeria. The instrument tagged *Performance Expectancy and Use of Koha ILS Questionnaire (PEUKQ)* was used for collecting data for this study. The use of the Koha ILS questionnaire was constructed by the researcher based on a literature review while the performance expectancy questionnaire was adapted from Venkatesh et al. (2003). The researchers administered the instrument to the 30 University of Ilorin library personnel, University of Ilorin, Kwara State in the North Central, Nigeria which is not included in the population of this study. The instrument had the following reliability coefficient: the purpose of using Koha ILS ($\alpha = 0.787$) and level of performance expectancy in the use of Koha ILS ($\alpha = 0.851$). Descriptive statistics (frequency counts, percentages, the mean and standard deviation) were used to answer the research questions while Pearson Correlation was used to test the hypothesis at a 0.05 level of significance. Two hundred and sixty-four (264) copies of the questionnaire were administered to the library personnel working in 12 public university libraries in South-west, Nigeria, two hundred and forty-four (244) copies were returned, out of these, two hundred and thirty-seven (237) were valid and useful for the computation of the analysis of the study yielding 92.42% response rate.

Results

Demographic Information of Respondents in Public Universities Libraries in South-west, Nigeria

Table 1: Name of Institution

	Frequency	Percentage (%)
Federal University of Oye, Ekiti State	10	4.2
Federal University of Akure, Ondo State	25	10.5
Obafemi Awolowo University, Ile-Ife, Osun State	35	14.8
Federal University of Agriculture, Abeokuta, Ogun State	28	11.8
Tai Solarin University of Education, Ijagun, Ogun State	5	2.1
LadokeAkintola University of Technology, Ogbomosho, Oyo State	10	4.2
Lagos State University of Science and Technology, Ikorodu, Lagos State	20	8.4
Lagos State University, Ojo, Lagos State	28	11.8
Olusegun Agahun University of Science and Technology, Okitipupa, Ondo State	9	3.8
Ekiti State University, Ado-Ekiti	35	14.8
BamideleOlumilua University of Education, Science and Technology, Ikere-Ekiti, Ekiti State	17	7.2
Osun State University, Osogbo, Osun State	15	6.3
Total	237	100.0

Gender of Respondents

	Frequency	Percentage (%)
Male	129	54.4
Female	108	45.6
Total	237	100.0

Qualification of Respondents

	Frequency	Percentage (%)
DLS/ND in LIS	51	21.5
HND in LIS	33	13.9
BLIS	40	16.9
PGD in LIS	11	4.6
MLIS	73	30.8
PhD in LIS	29	12.2
Total	237	100.0

Status of Respondents

	Frequency	Percentage (%)
Assistant Library Officer	13	5.5
Library Officer	27	11.4
Higher Library Officer	21	8.9
Senior Library Officer	27	11.4
Principal Library Officer	20	8.4
Chief Library Officer	11	4.6
Assistant Librarian	13	5.5
Librarian II	24	10.1
Librarian I	18	7.6
Senior Librarian	31	13.1
Principal Librarian	24	10.1
Deputy University Librarian	6	2.5
University Librarian	2	0.8
Total	237	100.0

Source: Authors' computation (2023)

Table 1 presents the demographic data of respondents in public university libraries in Southwest, Nigeria. The table shows that male respondents with a total of 129(54.4%) participated more than the female. The above table shows that the majority of respondents a total of 73(30.8%) possessed MLIS while the minority 11(4.6%) had PGD in LIS. The above table also revealed that the majority of the respondents a total of 31(13.1%) were senior librarians while the minority 2(0.8%) were deputy university librarians and university librarians.

Research Question 1: What are the purposes of use of Koha ILS in public university libraries in South-West, Nigeria?

Table 2: Purpose of using Koha ILS in the library

Items	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean \bar{x}	Std. Dev.
It is used in patron registration.	113 47.7%	110 46.4%	11 4.6%	3 1.3%	3.40	.64
It is used to add and edit bibliographic records of books.	102 43.0%	122 51.5%	10 4.2%	3 1.3%	3.36	.62
It is used for managing library stock.	94 39.7%	126 53.2%	17 7.2%	0 0.0%	3.32	.60
It is used in accessing a web-based OPAC.	109 46.0%	106 44.7%	19 8.0%	3 1.3%	3.35	.68
It is used to search the online catalogue	117 49.4%	106 44.7%	13 5.5%	1 0.4%	3.43	.61
It is used in charging and discharging books.	110 46.4%	103 43.5%	19 8.0%	5 2.1%	3.34	.71
It is used in monitoring the process of book purchasing and payments made.	79 33.3%	112 47.3%	31 13.1%	15 6.3%	3.07	.84
It is used to keep track of periodicals.	74 31.2%	131 55.3%	24 10.1%	8 3.4%	3.14	.72
It is used to add and edit bibliographic records of journals.	86 36.3%	116 48.9%	24 10.1%	11 4.6%	3.16	.79

Grand Mean = 3.29

Source: Authors' computation (2023)

Decision rule: Mean (\bar{x}) ≥ 3.29 is accepted

Table 2 shows the purpose of using Koha ILS in public university libraries in southwest, Nigeria. The decision rule categorized the purpose of using Koha ILS into two levels; accept and reject, based on the mean (\bar{x}) value of the variable. The (\bar{x}) for each purpose was calculated. The (\bar{x}) ≥ 3.29 is accepted while ≤ 3.28 is rejected as the purpose of use of Koha ILS. The result shows that Koha ILS is used by library personnel to search online catalogues ($\bar{x} = 3.43$); patron registration ($\bar{x} = 3.40$); add and edit books' bibliographic records ($\bar{x} = 3.36$); access web OPAC ($\bar{x} = 3.35$); charge and discharge books in the library ($\bar{x} = 3.34$), manage the library stock ($\bar{x} = 3.32$) were accepted as purposes of using Koha ILS while the Koha ILS is used to monitor the book purchase and payment made ($\bar{x} = 3.07$); add and edit journals' bibliographic records ($\bar{x} = 3.16$) and keep track of periodicals ($\bar{x} = 3.14$) were rejected as purposes of using Koha ILS. Hence, Koha ILS is used to search online catalogues, patron registration, add and edit books' bibliographic records, access web OPAC, charge and discharge books and manage the library stock in public university libraries in South-West, Nigeria.

Research Question 2: What is the level of performance expectancy of library personnel in the use of Koha ILS in public university libraries in South-West, Nigeria?

Table 3: Level of Performance expectancy of library personnel in using Koha ILS

Items	Very High	High	Moderate	Low	Mean \bar{x}	Std. Dev.
Koha proves beneficial to me in carrying out library operations.	99 41.8%	116 48.9%	19 8.0%	3 1.3%	3.31	.67
I can complete library work more rapidly with the help of Koha ILS.	97 40.9%	103 43.5%	33 13.9%	4 1.7%	3.23	.75
It improves my efficiency at work when I use Koha ILS.	90 38.0%	114 48.1%	26 11.0%	7 3.0%	3.21	.75
Koha ILS allows me to efficiently search, and retrieve bibliographic information about information resources, and render various library services to users as needed.	112 47.3%	106 44.7%	13 5.5%	6 2.5%	3.36	.70
I am confident that using Koha will improve my output at work.	89 37.6%	115 48.5%	29 12.2%	4 1.7%	3.21	.72
Grand mean = 3.26						

Source: Author's computation (2023)

Decision rule: Mean (\bar{x}) $1.00 \geq 1.74 =$ low; $1.75 \geq 2.49 =$ moderate; $2.50 \geq 3.24 =$ high and $3.25 \geq 3.99 =$ very high

Table 3 shows the level of performance expectancy of library personnel in using Koha ILS in public university libraries in southwest Nigeria. The decision rule categorized the performance expectancy into four levels: low, moderate, high and very high, based on the mean (\bar{x}) value of the variable. The average mean (\bar{x}) of the level of performance expectancy was also calculated. The results revealed that the level of performance expectancy of library personnel in Koha utilisation in southwest public university libraries in Nigeria was very high ($\bar{x} = 3.26$). Hence, Koha ILS is predominantly in its usage in rendering various library services to users as needed, beneficial in carrying out library operations, completing library work more rapidly, improving efficiency at work and confident that using Koha ILS will improve output at work.

Testing of Hypothesis

Ho₁: There is no significant relationship between performance expectancy and the use of Koha ILS in public university libraries in South-West, Nigeria.

Table 4: Performance expectancy and use of Koha ILS

Correlations

Variable	N	\bar{x}	SD	τ value	Sig. (2-tailed)
Use of Koha ILS	237	3.02	.41	.476**	.000
Performance expectancy In using Koha ILS	237	3.26	.58		

** Correlation is significant at 0.01 level (2-tailed), df = 235, Critical r-value = .148

A Pearson correlation coefficient was computed to ascertain the linear relationship between performance expectancy and the use of Koha ILS in public university libraries in Southwest Nigeria. The result revealed that the calculated τ value of 0.476** was greater than the critical r-value of 0.148 at a 0.01 level of significance with df = 235. With this result, the null hypothesis that there is no significant relationship between performance expectancy and the use of Koha ILS was rejected. The test of hypothesis revealed a significant relationship ($\tau = .476$, N = 237; p = .000) between performance expectancy and the use of Koha ILS. This implies that higher respondent performance expectancies are associated with higher use of Koha ILS in public university libraries in South-West Nigeria.

Discussion of Findings

Results on the purpose of using Koha ILS in public university libraries in Southwest, Nigeria indicated that Koha ILS was used to search online catalogues, patron registration, update and modify books' bibliographic records, access web OPAC, charge and discharge books in the library and manage the library stock. Hence, Koha ILS is used for library tasks. The findings corroborated the study of many researchers. The result supported by the findings of Tella and Olajide (2020) that Koha ILS favourably impacted the library services. It agrees with the findings of Ojedokun et al. (2021) that Koha ILS helped to improve the library's technical process and helped in the effective delivery of the library and information services. The result is supported by the findings of Chukwueke (2022) that Koha ILS was used to register users, catalogue and classify books, charge and discharge library information materials, search queries, access web-based OPAC systems, and library stock management. The result supported the findings of Jamogha et al. (2022) that Koha ILS is highly perceived as useful and it is used for making payments and placing orders for book purchases in universities in South-West Nigeria.

Results on the level of performance expectancy of library personnel in using Koha ILS in public university libraries in Southwest, Nigeria indicated that the level of performance expectancy of library personnel in using Koha ILS was high. Hence, Koha ILS is predominantly in its usage in rendering various library services to users at any time needed, is useful in their jobs, enables them to accomplish library tasks, increases their productivity at work and adds value to their performance at work. The finding is supported by Akanni & Adetimirin (2020) that the use of open-access resources was connected to a high level of performance expectancy and open-access materials were pertinent to their academic pursuits and helpful, offering a relative advantage. The finding is in line with the earlier findings of Alyoubi & Yamin (2019) that task fit significantly influences the intention to adopt the technology.

The finding supports that of Gholami et al. (2019) that perceived usefulness, compatibility and relative advantage were determinant factors in the adoption of technology-based library services among academic librarians. The finding supports that of Park et al. (2019) that perceived ease of use of the digital library significantly influenced perceived usefulness

which in turn affected the behavioural intention to use such technology. The finding is in line with the earlier finding of Abduljalil & Zainuddin (2021) that extrinsic motivation significantly influenced users' attitudes toward adopting accounting information systems. The finding is in support of Mairura (2021) that the relative advantage of one technology over another was a major factor influencing technology acceptance. The finding is in line with the findings of Alikoba, et al. (2019) that the system productivity and ease of use influenced the acceptance and use of Koha ILS in academic libraries in Uganda. Sun et al. (2018) reported performance expectancy as behavioural intentions that influence the use of technology.

The result showed that there was a significant and positive correlation between performance expectancy and the use of Koha ILS. Therefore, the null hypothesis that there is no significant relationship between performance expectancy and the use of Koha was rejected. The findings confirmed that the use of technology is largely determined by performance expectancy. The significant relationship was in line with a study by Mohideen (2021) that performance expectancy has a positive impact on the user acceptance of Koha ILS in public and private universities in Malaysia. Another study conducted by Ijeh et al. (2022) showed a significant positive relationship between performance expectancy and librarians' use of cloud computing technologies in academic libraries in South-west Nigeria. The finding is in support of Otubelu & Anunobi (2020) that there was a positive correlation between the lecturers' performance expectancy and the acceptance and use of open-access scholarly publishing in state universities in South-East Nigeria.

Furthermore, the significant relationship was in line with a study by Jamogha, et al. (2022) that perceived usefulness positively influenced the adoption of Koha ILS. Mayayise (2021) asserted that performance expectancy has a positive effect on the intention to adopt software in South Africa. The finding is in support of Khan (2020) that perceived usefulness was the positive and significant predictor of the librarians' intention to adopt Koha ILS. The finding of Commer et al. (2018) established that performance expectancy significantly influences the behavioural intention to adopt the technology among Pakistan consumers. The finding of Alraja, et al. (2019) established that performance expectancy significantly influences employees' intention to adopt and use electronic government in the Sultanate of Oman.

Conclusion and Recommendations

Based on the findings of the study, this study concludes that the use of Koha ILS in public university libraries in southwest, Nigeria is determined by performance expectancy. The use of Koha ILS by library personnel for library operations is crucial in the attainment of library goals and objectives. However, this could be possible when the performance expectancy of staff is high to improve employee work performance and productivity. If this is ignored by the management of university libraries, could hurt work productivity and performance. Based on the findings of this study, it is recommended that universities and library management should improve and sustain the high level of performance expectancy of library staff to use Koha ILS to perform library tasks effectively and efficiently in public universities in southwest Nigeria.

References

- Abduljalil, K. & Zainuddin, Y. (2021). Intrinsic and extrinsic motivation as attitude factors towards adoption of accounting information system (AIS) in Libyan SMEs. *International Journal of Academic Research in Accounting, Finance and Management Science*, 215-227. <http://dx.doi.org/10.6007/IJARAFMS/v5-i1/1553>.
- Akanni, O. T. & Adetimirin, A. E. (2020). Performance expectancy as a determinant of use of open access resources by lecturers in university of Ibadan, Nigeria. *International Journal of Library and Information Science*, 5(2), 58-65.

- Alikoba, E., Kiwelu, J. E. M., &Lwanga, E. (2019). Factors influencing the acceptance and use of Koha library software in Academic Libraries of Uganda. *International Journal of Library and Information Science (IJOLIS)*, 4, 1-21.
- Alraja, M. N., Hammami, S., Chikhi, B. &Fekir, S. (2019). The influence of effort and performance expectancy on employees to adopt e-government: Evidence from Oman. *International Review of Management and Marketing*, 6(4), 930-934.
- Alyoubi, B. A. &Yamin, A. Y. (2019). The impact of task technology fit on employee job performance. *Marketing and Management of Innovations*, 4, 140-160.
- Chukwueke, C. (2022). Utilization of open source software in university libraries in South-South Nigeria. *Library Philosophy and Practice (e-journal)*, 1-18.
<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=13086&context=libphilprac>.
- Commer, P. J., Sci, S., Sair, S. A. & Danish, R. O. (2018). Effects of performance expectancy and effort expectancy on the technology commerce adoption intention through personal innovativeness among Pakistan consumers. *Pakistan Journal of Consumer and Social Sciences*, 12(2), 501-520.
- Gholami, Z., Abdekhoda, M., &Gavgani, V. Z. (2019). Determinant factors in adopting mobile technology-based services by academic librarians. *DESIDOC Journal of Library and Information Technology*, 38(4), 271-277. <http://doi:10.1442/djit.38.4.12676>
- Hamzat, S., &Mabawonku, I. (2020). Influence of performance expectancy and facilitating conditions on use of the digital library by engineering lecturers in universities in South-west, Nigeria. *Library Philosophy and Practice (e-journal)*, 1-17.
- Haneefa, M. K., Divya, P. & Lakshmi, K. (2022). Adoption of open-source software for library management. *Knowledge Organisation in Academic Libraries (KOAL)*, 185-194.
- Ijeh, C. T., Omorodin, O., &Olorunyomi, G. T. (2022). Effort and performance expectancies as a determinant of librarians' use of cloud computing technologies in academic libraries in South-west Nigeria. *SAU Science-Tech Journal*, 7(1), 60-77.
<https://journals.sau.edu.ng/index.php/sjbas>
- Jamogha, E., Owoye, J., & Godwin, S. (2022). Perceived usefulness and adoption of koha integrated library systems by librarians in universities in southern Nigeria. *Digital Library Perspectives*, 38(1), 55-68. <https://doi.org/10.1108/DLP-12-2020-0130>
- Khan, A. (2020). Influencing the intention of Pakistani librarians toward the adoption of Koha- an Integrated Open Source Integrated Library System (OSILS) in Pakistan. *Library Philosophy and Practice (e-journal)* 1-52.
<https://digitalcommons.unl.edu/libphilprac/4360>.
- Khan, A. (2020). Investigating the factors influencing librarians' intention toward the adoption of Koha- an open-source integrated library system in Pakistan. *Library Philosophy and Practice (e-journal)*, 1-51.
- Mairura, K. O. (2021). Relative advantage as a determinant of technology adoption among automobile mechanics in micro and small enterprises in Kenya. *Journal of Humanities and Social Science (IOSR-JHSS)*, 21(1), 86-92.
- Mayayise, T. (2021). Extending the unified theory of acceptance and use of technology with ISO/IE 27001 security standard to investigate factors influencing Bring Your Own Device (BYOD) adoption in South Africa. *South African Journal of Information Management*, 23(1), 1-9. <https://doi.org/10.4102/sajim.v23i1.1376>.
- Mohideen, Z. A. (2021). *Librarians' acceptance of open source library information system using the osis-utaut model* [Doctoral dissertation, University of Malaya, Kuala, Lumpur].
- Ojedokun, A. A., Olla, G. O., & Adigun, S. A. (2021). Integrated library system implementation: The Bowen University Library Experience with Koha Software. *African Journal of Library, Archives & Information Science*, 26(1), 31-42.

- Omeluzor, S. U. & Madukoma, E. (2019). *Use of electronic information resources and research output by academic staff in private universities in Ogun State, Nigeria*. <https://doi:10.3968/J.CSS.1923669720120803.1895>.
- Otunla, A. O., Akintola, B. O., & Omotayo, O. A. (2022). A survey of adoption and use of koha library integrated system in Nigeria. *Library Philosophy and Practice (e-journal)*, 1-13.
- Park, N., Roman, R., Lee, S. & Chung, J. (2019). User acceptance of a digital library system in developing countries: An application of the technology acceptance model. *International Journal of Information Management*, 29(3), 196–209.
- Peretemode, V. F. P. & Peretemode, O., & Ibe, A. E. (2020). *Statistical methods in behavioural sciences and education: A systematic approach*. O.O.P. Publishers.
- Sun, P., Tsai, R., Finger, K., Chen, Y. & Yeh, D. (2018). *What drives successful e-learning? An empirical investigation of the critical factors influencing leader satisfaction*. <https://doi:10.1016/j.compedu.2006.11.007>.
- Tella, A. & Olajide, T. I. (2020). An empirical investigation on the impact of Koha on library services in selected academic libraries in Nigeria. *Annals of Library and Information Studies*, 64, 113-115.
- Venkatesh, V., Morris, M. G., Davis, F. D., & Davis, G. B. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27, 425-478. http://venkatesh.com/Downloads/Papers/fulltext/pdf/Venkatesh_Thong_Xu_MISQ_forthcoming.pdf.
- Wu, M., Yu, P., & Weng, Y. (2012). A study on user behaviour for I Pass by UTAUT: Using Taiwan's MRT as an example. *Asia Pacific Management Review*, 17(1), 91-111. <http://www.apmr.management.ncku.edu.tw>.