Selection and use of KOHA software in two private Nigerian universities

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Introduction

A library system embraces all the different sections or units of the library and the computer files are interlinked with one another so that additions, multiplications and deletions on one file automatically activate appropriate changes in related files (Oyinloye, 2004). According to Okewale and Adetimirin (2011), library software allows library staff to increase efficiency, eliminate repetition, improve accuracy, save time and provide relevancy. A library system makes information available through one source giving a comprehensive and exhaustive assemblage of information on any given subject area (Adesanya *et al*, 2004). Presently, the image of a library is increasingly being measured by the services it offers in terms of helping clients to access universal information rather than its respective collection (Ejedafiru, 2010). University libraries need access to a larger range of information resources through sharing networks to meet the needs of their clients. However, this is dependent on selection and use of the most appropriate software for the library.

Selection of library software must be carefully done to achieve success in automation. Fatoki (2002) reported that most Nigerian libraries do not strictly adhere to automation guidelines such as: information gathering, funding, employing a library system manager or analyst who will be involved in the automation process. Even at the selection stage, experienced staff may not be informed or involved in determining needs before the acquisition.

Faboyinde (2006) remarked that selection of appropriate library software is critical to the success of ICT. Without good software adopted and used in the library, the library may not be able to perform effectively. Therefore, it is important to carefully select software when automating a library Fatoki (2002) also stated that hardware, operating system, memory requirements and programming language are necessary to consider in software selection. The library software should be user-friendly, possess the capabilities to allow records to be created and transferred from one module to another. Oketunji (2006) highlighted the following as criteria for selecting library application software and sustaining it: hardware connections, subscribers' rights in respect of the software, history of the supplier, previews or demonstrations, pricing structure, level of sophistication, support issues, reference sites, teaching aids, and system administration.

Mulla and Chandrashekara (2011) support the following criteria for software selection: evaluation of each module, experimenting with demos of the software, experiences of other librarians, vendor approaches and cost effectiveness. To assure the greatest degree of user satisfaction and effective services, library staff and users' opinions should be considered in selecting foreign or local software or developing software in-house. Standard library software should be chosen from among the available sources which will facilitate the exchange of data among libraries through computer networking that can be helpful for future resource sharing. Therefore, to provide efficient services, a library must select the most appropriate software for its use.

Problem statement, objectives and methodology

Nigerian university libraries are adopting software to keep abreast with the challenges of 21st but for many there are poor results due to inappropriate library software selection without considering library needs. As a result, many users in Nigerian university libraries may complain of inefficient information services. This research therefore, investigates the selection and use of the KOHA software by library staff and faculty in two private university libraries. The objectives of the study were to: determine the criteria for selection of KOHA software; examine challenges experienced in the selection of KOHA software; determine the level and length of use of KOHA software; examine other factors affecting the use of KOHA software.

A descriptive survey was employed with a sample size of 255 from a total population of 418 faculty, systems librarians and heads of library units from two private universities (Bowen and Redeemers). Questionnaires, interviews and observation were used for data collection. Of the 255 copies of the questionnaire distributed, 176 were completed (70.4 percent). Redeemer University (RU) had the highest number of respondents (101), while Bowen University (BU) had the lowest number of respondents of (75).

Results and discussion

The findings from interviews with the systems librarians indicated that KOHA was implemented in BU and RU in 2007 and 2011, respectively. RU library migrated to KOHA in 2011 from LIBRARY PORTAL because of some limitations. Before the adoption of KOHA, library staff in RU held several meetings, conducted interactive sections, and invited vendors before selecting KOHA. This finding is a better process than the

problems noted by Nkhoma (2003) that stated that the selection of STYLIS as the main software for library automation was viewed as a costly mistake in Zambia Copperbelt University due to lack of continuing support. It also supports the findings of Fatoki (2002) who reported that many automation efforts in Nigeria have been frustrated due to lack of adequate information in the selection of effective library software.

In RU, 66.7 percent of the library unit directors based the selection of software on users' accessibility of information without programmers' assistance and intervention. The systems librarian selected the software because it was open source, modular, flexible, easy to use, ran on Microsoft Windows and had a relatively large user community. The systems librarian and 40 percent of the unit heads in BU selected the software based on its being accessibility, ease of use, ability to run on Linux, and flexibility. However, all the heads of units in both libraries selected based on preliminary analysis study and meeting with the systems requirement (Table I).

The library is established to satisfy the information needs of users by providing access to resources and services, and library software is acquired to facilitate achieving this goal. Therefore, in the acquisition of software, the users are taken into consideration by selecting a software that is easy to use and user friendly. The findings corroborates those of Okewale and Adetimirin (2011), Nkhoma (2003) and Fatoki (2002) who reported that modularity, ease of use, user friendliness, integration, flexibility, versatility, and systems compatibility were critical factors to consider in software acquisition.

From the interview, the systems librarian at RU said that the major challenge encountered was the availability of many open source software to choose from. This necessitated a lot of reading on the different software, having several meetings and interactive sections and inviting vendors for demonstrations before finally selecting KOHA. The systems librarian in BU was not aware of the challenges faced in selection because he was not with the institution when the software was selected. From the result, it can be concluded that

Table I.

Criteria and characteristics of software

	University			
	RU		BU	
Variables of software	No.	%	No.	%
Selection criteria				
Easy to use	1	33.3	2	40
Access to users	2	66.7	2	40
Comprehensive	–	–	–	–
Flexible	–	–	1	20
Free of charge	–	–	–	–
Type of software				
Integrated	2	66.7	5	100
Stand-alone	1	33.3	–	–
Mode of acquisition				
University librarians complied with conference, seminar, etc.	–	–	–	–
Preliminary systems analysis study	3	100	5	100
Imposition of software by management	–	–	–	–
Software characteristics				
Multitasking	3	100	2	40
Data transfer capabilities	–	–	2	40
Increased productivity	–	–	1	20
Systems software				
Microsoft Windows	2	66.7	2	40
Linux	1	33.3	3	60
Capability to meet				
Yes	3	100	5	100
Systems requirement				
No	–	–	–	–

selection of library software is a time-consuming work that involves a long-term commitment of financial and human resources. The decision should be based on needs assessment, review of the literature, evaluation and comparison of existing software packages. This finding supports that of Tiamiyu (2000) that automation involves long-term planning and commitment.

Information retrieval was the main purpose of using the software in BU (40 percent) while it was used in RU equally (33 percent) for database creation, cataloging and circulation control. Both universities had a large user acceptance with Redeemer and Bowen having 66.7 and 100 percent, respectively, (Table II). The purpose of using the software in both universities was mainly to search for information in books with Bowen having 46.9 percent and Redeemer 43.9 percent. This disagrees with the findings of Okewale and Adetimirin (2011) and Uwaifo (2008) who reported that the cataloging module was used the highest by library staff in Nigerian university libraries.

The software was used the most by faculty in both universities with those at Bowen being the highest (64.3 percent) than those in Redeemer (49.0 percent) (Table III). The findings indicated that the frequency of use of the software by the faculty was not encouraging. This may be due to their busy schedules which include teaching, research and community service. Over 60 percent of the respondents in both universities were knowledgeable about the use of the software and found it easy to use while about 50 percent were fairly knowledgeable in searching with the software. On the basis of satisfaction with the library software, 51.0 and 62.9 percent in RU and BU libraries, respectively, were satisfied.

The major factors affecting library software use by faculty in both universities were not allowing the use of flash drives and inadequate orientation on the use of software with over 44.9 percent of the respondents in agreement (Table IV). Lack of flash drive use may be a measure of guarding against virus attacks to the computers. The challenge of inadequate orientation

Table II.
Purpose of using software package

| | University | | | |
| | RU | | BU | |
Purpose	No.	%	No.	%
Units' head				
Database creation	1	33.3	1	20
Cataloguing	1	33.3	1	20
Circulation control	1	33.3	1	20
Information retrieval	–	–	2	40
Users' acceptance				
Larger user base	2	66.7	5	100
Low user base	1	33.3	–	–
Library software use for searching				
Yes	51	52.0	46	65.7
No	47	47.9	24	34.3
Faculty				
Search for information on books	43	43.9	46	46.9
Search for information on journals	28	28.6	8	8.2
Browse only	18	18.4	8	8.2
Print records	3	3.1	3	3.1
Search for indexed records	6	6.1	5	5.1

Table III.
Frequency of using library software

| | University | | | |
| | RU | | BU | |
Frequency	No.	%	No.	%
Library software use				
Daily	8	8.2	4	5.7
Twice a week	17	17.4	10	14.3
Monthly	8	8.2	3	4.3
Occasionally	48	49.0	45	64.3
Never	17	17.4	8	11.4
Knowledge of use				
Highly knowledgeable	1	33.3	2	40.0
Fairly knowledgeable	–	–	–	–
Knowledgeable	2	66.7	3	60.0
Not knowledgeable	–	–	–	–
Knowledge of searching				
Highly knowledgeable	25	25.5	21	30.0
Fairly knowledgeable	55	56.1	40	57.1
Knowledgeable	7	7.1	4	5.7
Not knowledgeable	11	11.2	5	7.1
Level of ease in use				
Very easy	21	21.4	12	17.1
Easy	59	60.2	45	64.3
Not easy	15	15.3	10	14.3
Difficult	1	1.0	1	1.4
Very difficult	2	2.0	2	2.9
Level of satisfaction				
Very satisfied	28	28.6	9	12.9
Satisfied	50	51.0	44	62.9
Fairly satisfied	17	17.4	14	20.0
Dissatisfied	3	3.1	3	4.3

Table IV.
Challenges to use of library software

Challenges	RU agree n		Disagree n	%	BU agree n	%	Disagree N	%
Erratic power supply			3	100.0			5	100.0
Lack of ICT skill			3	100.0	1	20.0	3	80.0
Incompatible systems requirement	1	33.3	2	66.7			5	100.0
Inadequate training	1	33.3	2	67.0			5	100.0
Lack of funding	1	33.3	2	67.0			5	100.0
Lack of technical support	1	33.3	2	67.0			5	100.0
Version not current	1	33.3	2	67.0			5	100.0
Cost of maintenance	1	33.3	2	67.0			5	100.0
Absence of user manual	1	33.3	2	67.0			5	100.0
Low user group	1	33.3	2	67.0			5	100.0
Low knowledge of library standard	1	33.3	2	67.0			5	100.0
Use of flash drive is not allowed to obtain data	61	62.3	37	37.7	36	51.0	34	49.0
Inadequate orientation on the use of software	44	44.9	54	55.1	46	66.0	24	34.0

may be due to the priority given to new students on library orientation over all other users including faculty inclusive. The trend in most Nigerian university libraries is to have yearly orientation for all new students (undergraduates and postgraduates). The library staff must give adequate orientation to all users especially when new developments occur in the library so that all users would be able to adapt easily. Adequate awareness should be made for library users on the effective use of the software to achieve maximum benefit. Oyelude (2011) emphasized the priority of user education by stating that it is necessary for library users to learn standard software and network applications such as internet, email and other digital tasks or maximum information retrieval.

Conclusion and recommendations

Software adoption by libraries is critical for improved service delivery. To ensure adoption, selection must be done to choose the most appropriate software for the library to fulfill its objectives. Libraries should analyze users' needs, current infrastructure, feasibility study, search for reviews on software being considered, consult with the colleagues, preview and test the software before its selection. Users should also be given adequate orientation on the use of the software for maximum use.

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