

January 2019

Evaluation of Automated Cataloguing System in Academic Libraries in Oyo State Nigeria

Oluwole A. Odunola

Ladoke Akintola University of Technology, oluwole_odunola@yahoo.com

A Tella

University of Ilorin, Ilorin Nigeria, Tellayinkaedu@Yahoo.com

O O. Oyewumi

Ladoke Akintola University of Technology, Ogbomoso. Oyo State, Nigeria, oooyewumi@lautech.edu.ng

T A. Ogunmodede

Ladoke Akintola University of Technology, Ogbomoso. Oyo State, Nigeria, tamodede@yahoo.com

S O. Oyetola

Ladoke Akintola University of Technology, Ogbomoso. Oyo State, Nigeria, solomonoyetola@yahoo.com

Follow this and additional works at: <http://digitalcommons.unl.edu/libphilprac>

 Part of the [Library and Information Science Commons](#)

Odunola, Oluwole A.; Tella, A; Oyewumi, O O.; Ogunmodede, T A.; and Oyetola, S O., "Evaluation of Automated Cataloguing System in Academic Libraries in Oyo State Nigeria" (2019). *Library Philosophy and Practice (e-journal)*. 2152.
<http://digitalcommons.unl.edu/libphilprac/2152>

EVALUATION OF AUTOMATED CATALOGUING SYSTEM IN ACADEMIC LIBRARIES IN OYO STATE NIGERIA

Odunola, O. A.
oluwole_odunola@yahoo.com
Olusegun Oke Library,
Ladoke Akintola University of Technology Ogbomosho, Nigeria

Oyewumi, O. O.
oooyewumi@lautech.edu.ng
Deputy Librarian
Olusegun Oke Library,
Ladoke Akintola University of Technology Ogbomosho, Nigeria

Ogunmodede, T. A.
tamodede@yahoo.com
Olusegun Oke Library,
Ladoke Akintola University of Technology Ogbomosho, Nigeria

Oyetola, S. O.
solomonoyetola@yahoo.com
Olusegun Oke Library,
Ladoke Akintola University of Technology Ogbomosho, Nigeria

Daniel, O.
University of Ibadan, Ibadan Nigeria.

Abstract

This study investigated automated cataloguing system in academic libraries in selected higher institutions in Oyo State Nigeria. The population of the study covered all the forty one (41) professional and para-professional cataloguers working in the cataloguing section. Total enumeration technique was used for data collection. Questionnaire was distributed to all the cataloguers in the selected institutions. Descriptive statistics was used to analysed the data collected. The result of the study revealed that automated cataloguing system saves time taking to catalogue information materials in the libraries. The result of the study also revealed that the selected institutions did not share resources among themselves. The finding of the study revealed that automated cataloguing system made cataloguing of information materials in the libraries faster. Therefore, the study concluded that automated cataloguing system in institutions' libraries is a desirable one. Hence, the study recommended that in addition to cataloguing section, all other sections in the libraries be automated and provision of information technology tools needed for effective system be made available in the libraries.

Key words: Automation, Evaluation, Cataloguing, Academic Institution, Oyo State, Nigeria

Introduction

Cataloguing is the hub of librarianship. It is the process of preparing a catalogue. Cataloguing is a structured arrangement of the bibliographic details of all the information sources available in a library. It produces an inventory that serves as access points to the library resources. Before the advent of computers, libraries used card catalogue to index their holdings and this method of managing records and public catalogue was time consuming and cumbersome. Likewise, there is a decrease in efficiency which manifests in delays, backlog and heavy workload on staff and the job of record keeping and monitoring performance. The introduction of computer to cataloguing system gives rise to the creation of databases in order to meet up with the trend of library automation. Automation saves time and labour of staff involved in sorting and re-sorting of card catalogue and keeping it up to date (Uzomba, Oyebola and Izuchukwu, 2015).

According to Ogunmodede, Nwokocha and Apata (2014), libraries globally have been transformed from a purely traditional manual service delivery system to a more dynamic one with the use of ICT for information organization and dissemination. Information communication technology has brought about change in the roles of librarians in the library. The impact of ICT on technical services has brought a complete change in the roles of cataloguers. The roles of cataloguers involved working with the operations that have become integrated with the use of information technology or automation. Libraries can now derive and preserve cataloguing records using automated system. Libraries can log on to the Online Computer Library Center (OCLC) and derive the bibliographic details of their information sources from the OCLC database because it contains almost all works that have been published. As far back as the year 2000, “the OCLC World catalogue contained as much as nearly 40 million unique records and its constituency included 26 participating libraries in 64 countries spread all over the world (Egbailenamhe and Japhet, 2014).

In Oyo State, Nigeria, all the degree awarding institutions have automated their cataloguing system in their libraries to maximize the benefits inherent in library automation. The institutions use different software packages to automate their cataloguing automation system. University of Ibadan Library adopted the CDS/ISIS software that was developed and distributed freely by United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1993. Ladoké Akintola University of Technology Ogbomoso, Ajayi Crowder University Oyo, Lead City University Ibadan, and Baptist Theological Seminary Ogbomoso libraries adopted KOHA for the automation of their cataloguing system. The reasons or the

objectives the institutions are automating their cataloguing system is to provide faster, easier and quicker library services and to share library resources and also remove duplication of work. Therefore, it is important to evaluate the automation of cataloguing system in these libraries in order to know whether the libraries are accomplishing the objectives and benefits derived from the automation. The evaluation of the cataloguing system in the institution will provide information that will be of benefits for other institutions who are interested in library automation (Kari and Baro, 2014).

Evaluation is a systematic determination of a subject's merit, worth and significance, using criteria governed by a set of standards. It can assist an organization such as libraries to assess realisable concept or proposal, or any alternative, to help in decision-making; or to ascertain the degree of achievement or value in regard to the aim and objectives and results of any such action that has been completed. The primary purpose of evaluation, in addition to gaining insight into prior or existing initiatives, is to enable reflection and assist in the identification of future change. Evaluation is often used to characterize and appraise subjects of interest in a wide range of human enterprises, including the arts, criminal justice, foundations, non-profit organizations, government, health care and other human services (Sarah, 2012). Evaluation basically involves obtaining feedback about how a person or an organization achieves its goals and objectives. In general terms, the process serves as an auditing and control function generating information upon which certain personal and organizational decisions are made.

There are three levels of performance evaluation in an automated environment. These are: effectiveness, cost effectiveness and cost benefit analysis. Effectiveness can be measured in terms of how well a service satisfies the demand placed on it by its users. It can also measure output relative to objectives and targets. Cost effectiveness is concerned with a system's internal operating efficiency. For example, to measure how efficiently cost-wise the system is satisfying its objectives. Cost-benefit analysis is concerned with assessing the worth of the service relative to the cost of providing it. In terms of effectiveness, an ideal library application package should be able to perform and meet all expectations for which they are developed. In other words, application software should fulfill all systems expectations regarding their ability to perform library housekeeping functions (Boateng, Agyemang and Dzandu, 2014).

The benefits of automated cataloguing system in the library cannot be overemphasized. These benefits include save time taking to process information materials in the library, resources sharing and removing of duplication of work. Despite the benefits of

automated cataloguing system, there are complaints that users are not patronising the library. The cataloguers' staff also complain about the functionality of ICT tools needed to effectively carry out their myriad of duties. It is against this background that this research, evaluation of automated cataloguing system in academic libraries is carried out in all the degree awarding higher institutions in Oyo State Nigeria.

Objective of the Study

The objective of the study is to:

- (i) investigate whether the automated cataloguing have an effective control over the entire cataloguing operation in academic libraries in Oyo Sate Nigeria;
- (ii) to find out if automated cataloguing saves the time of the cataloguers in academic libraries in Oyo State Nigeria;
- (iii) find out whether the automated cataloguing system effectively share resources among various the academic libraries in Oyo State Nigeria;
- (iv) find out availability and functionality of ICT tools for the automated cataloguing in academic libraries in Oyo State Nigeria;
- (v) find out whether duplication of work is eliminated by the use of automated cataloguing in academic libraries in Oyo State Nigeria; and
- (vi) investigate the challenges associated with automated cataloguing in academic libraries in Oyo State Nigeria.

Research Questions

- (i) Does automated cataloguing system have an effective control over the entire cataloguing operation in academic libraries in Oyo Sate Nigeria?
- (ii) Does automated cataloguing system saves the time of the cataloguers in academic libraries in Oyo State Nigeria?
- (iii) Does automated cataloguing system effectively share resources among various the academic libraries in Oyo State Nigeria?
- (iv) What are the available and functional ICT tools used for automated cataloguing system in academic libraries in Oyo State Nigeria?
- (v) Does automated cataloguing system eliminated duplication of work in academic libraries in Oyo State Nigeria?
- (vi) What are the challenges associated with automated cataloguing system in academic libraries in Oyo State Nigeria.

Scope of the Study

The study focused on the professional and para-professional cataloguers of University of Ibadan, Ladoke Akintola University of Technology Ogbomoso, Ajayi Crowder University Oyo, Lead City University Ibadan, and Baptist Theological Seminary Ogbomoso Libraries. The study also focuses on the evaluation of automated cataloguing system in academic libraries Oyo State, Nigeria.

Literature Review

Automating an academic library is the process which restructures its functions and reinvents its services. By keeping a database as the basis, automation converge new technologies of information storage and retrieval with traditional housekeeping operations. An automated academic library can serve the teaching and learning of the school community more effectively. A reduction in the time needed for routine operations can be utilized to give customized services to the users. Automation of the cataloguing system helps the students, researcher and other users of the library to become skilled information users and lifelong learners. Boateng, Agyemang and Dzandu (2014) observed that the factors necessitating automation of university libraries as explosion of knowledge resulting in numerous specializations and flow of almost non-stop information; inability of users to explore unlimited literature; wastage of enormous precious time in handling routine and repetitive library operations; even the largest of the libraries cannot acquire and make available the entire published materials; and to facilitate easy, fast, reliable and sharing of resources between libraries, cutting across space and time.

Furthermore, Egbailenamhe and Japhet, (2014) observed that automated cataloguing system saves the time of cataloguers while Hussaini, Vashistha, Jimoh and Jimah (2017) also observed that automation of cataloguing system facilitates resource sharing, networking and sharing of databases at both national and international level to facilitate a wider dissemination of information resources and services by the libraries. Furthermore, the authors reported that automated cataloguing system improves and increases operational efficiency and effectiveness of library services by enhancing the management and the retrieval of information resources.

The Oxford Advanced Learners Dictionary, International Students edition, defines automation as the use of machines to do work that was previously done by people. Automated systems are used in a wide variety of tasks and contexts, from circulation control, acquisitions and cataloguing to the provision of web services and electronic databases. Cataloguing and classification are two activities that take place in the cataloguing department. These activities are carried out to ultimately assist users in locating specific pieces of information by providing like an index tool to the library collection. Here, access to information in many forms and formats are possible and related information sources are collocated together (Sivasubramanian, 2012).

Chukwuemeka, Oriogu, Ogbuiyi and Ogbuiyi (2015) investigated the influence of automated cataloguing system operation on library services in three selected academic libraries in South Western Nigeria. Survey research method was adopted for the study and structured questionnaire was used to collect data. The data were analysed using descriptive statistics. The result of the study revealed automated cataloguing system increased sharing of information, saves time, reduces error and helps to keep track of location of item in the library. In addition, the study revealed the challenges of automated cataloguing system to include low speed access, erratic power supply, poor network and lack of sufficient computer systems were encountered on the use of automated cataloguing system. Therefore, this study seeks to evaluate automated cataloguing in other institutions similar to the study.

Methodology

Descriptive survey research design was adopted for this study due to the nature of the study as an evaluative study. The total population of the study covered 41 professional Librarians (i.e. those who had a minimum of first degree in Library Studies) and paraprofessional that is the Library Officers cadre working in cataloguing sections in all the degree awarding institutions in Oyo State Nigeria. Total enumeration technique was used to select the respondents and 41 copies of questionnaire were distributed to the respondents in the libraries. 39 copies of questionnaire were returned, representing a response rate of 95.1%. The data collected were analysed using Statistical Package for Social Sciences (SPSS). Tables, frequencies, percentages, mean and standard deviation were used to test the research questions postulated for this research.

Result and Discussion

Table 1: Demography Variables of Respondents

| S/N | Demography | Frequency | Percentage (%) | |
|-----|--------------------|------------------------|----------------|------------|
| 1 | Sex | Male | 25 | 64.1 |
| | | Female | 14 | 35.9 |
| | | Total | 39 | 100 |
| 2 | Qualification | ND | 7 | 17.9 |
| | | HND | 5 | 12.8 |
| | | BLIS | 9 | 23.1 |
| | | MLIS/MLS | 15 | 38.5 |
| | | Ph.D. | 3 | 7.7 |
| | | Total | 39 | 100 |
| 3 | Status | Library Officer | 4 | 10.3 |
| | | Senior Library Officer | 1 | 2.6 |
| | | Assistance Librarian | 6 | 15.3 |
| | | Librarian II | 8 | 20.5 |
| | | Librarian I | 11 | 28.2 |
| | | Senior Librarian | 6 | 15.3 |
| | | Principal Librarian | 3 | 7.7 |
| | | Total | 39 | 100 |
| 4 | Working Experience | 1-5 years | 22 | 56.4 |
| | | 6-10 years | 14 | 35.9 |
| | | 11-15 years | 1 | 2.6 |
| | | 16-20 years | 1 | 2.6 |
| | | Above 20 years | 1 | 2.6 |
| | | Total | 39 | 100 |

Table 1 shows the distribution of respondents by demographic variables. Majority of the respondents 25 (64.1%) respondents were male while 14 (35.9%) respondents were females. Majority of the respondents were master degree holder, 15 (38.5%) respondents had

MLIS/MLS. 9 (23.1%) respondents had BLIS/BLS; 7(17.9%) respondents had ND; 5 (12.8%) respondents had HND and 3(7.7%) respondents had Ph.D respectively. Majority of the respondents, 11 (28.2%) were Librarian I. 8 (20.5%) respondents were Librarian II and 6(15.3%) respondents were Senior Librarian. The majority, 22 (56.4%) respondents had between 1 and 5 years of working experience. 14 (35.9%) respondents had between 6 and 10 years of working experience. While 1 (2.6%) respondents had between 11 and 15, 16 and 20 and above 21 years respectively.

Answers to Research Questions

Research Question One: Does automated cataloguing system have an effective control over the entire cataloguing operation in academic libraries in Oyo State Nigeria?

Table 2: Automated cataloguing system have effective control over the entire cataloguing operation in academic libraries in Oyo State Nigeria

| Does automated cataloguing has an effective control over the entire cataloguing operation in academic libraries in Oyo State Nigeria? | Yes | No | Total |
|--|------------|-----------|---------------|
| Frequency | 39 | - | 39 |
| Percentage | 100.0 | - | 100.0% |

Table 2 shows that automated cataloguing has effective control over the entire cataloguing operation in academic libraries in Oyo State Nigeria. 39 (100.0%) respondents indicated that automated cataloguing has effective control over the entire cataloguing operation in the libraries in the state.

Research Question Two: Does automated cataloguing system saves the time of the cataloguers in academic libraries in Oyo State Nigeria?

Table 3: Automated cataloguing save the time of cataloguers in academic libraries in Oyo State

| Does automated cataloguing save the time of cataloguers in academic libraries in Oyo State Nigeria? | Yes | No | Total |
|--|------------|-----------|---------------|
| Frequency | 38 | 1 | 39 |
| Percentage | 97.4% | 2.6% | 100.0% |

Table 3 shows that automated cataloguing saves the time of cataloguers in academic libraries in Oyo State Nigeria. 38(97.4%) respondents agreed that automated cataloguing saved the time taken to catalogue information materials in the libraries.

Research Question Three: Does automated cataloguing system effectively share resources among various the academic libraries in Oyo State Nigeria?

Table 4: Automated cataloguing effectively share resources among the various academic libraries in Oyo State Nigeria

| Does automated cataloguing share resources effectively among the various academic libraries in Oyo State Nigeria? | Yes | No | Total |
|--|------------|-----------|---------------|
| Frequency | - | 39 | 39 |
| Percentage | - | 100.0% | 100.0% |

Table 4 shows if the institutions shared resources effectively among themselves in Oyo State Nigeria. 39 (100%) respondents indicated no to automated cataloguing system shared resources effectively among themselves in the state.

Research Question Four: What are the available and functional ICT tools used for automated cataloguing system in academic libraries in Oyo State Nigeria?

Table 5: Automated cataloguing eliminates duplication of work in academic libraries in Oyo State Nigeria

| Does automated cataloguing eliminate duplication of work in libraries in higher institutions in Oyo State Nigeria? | Yes | No | Total |
|--|-------|----|---------------|
| Frequency | 39 | - | 39 |
| Percentage | 100.0 | - | 100.0% |

Table 5 shows that automated cataloguing eliminates duplication of work in the academic libraries in Oyo State Nigeria. 39 (100.0) respondents indicated yes that automated cataloguing eliminated duplication of work in higher institutions in the state.

Research Question Five: Does automated cataloguing system eliminated duplication of work in academic libraries in Oyo State Nigeria?

Table 6: Availability and functionality of ICT Tools for the automated cataloguing in academic libraries in Oyo State Nigeria

| S/N | Items | Yes | No | Total Percentage |
|-----|--|---------------|---------------|------------------|
| 1 | There is availability of functional personal computer | 30 (77%) | 9 (23%) | 39 100% |
| 2 | There is internet connection | 39 (100%) | 0 | 39 100% |
| 3 | There is commensurable internet bandwidth | 30 (77%) | 9 (23%) | 39 100% |
| 4 | The printer, UPS and other peripheral devices are available | 26 (66.7%) | 13 (33.3%) | 39 100% |
| 5 | The printer, UPS and other peripheral devices are functional | 26 (66.7%) | 13 (33.3%) | 39 100% |

The table 6 indicates the availability and functional of ICT tools use for automated cataloguing in libraries of higher institutions in Oyo State Nigeria. 30 (77%) respondent indicated yes that there was commensurable internet bandwidth in their libraries and that there was available and functional personal computer use to perform tasks in their library. Also, 26 (66.7%) respondents indicated that there was availability of functional printer, UPS and other peripheral devices needs for automated cataloguing in the libraries.

Research Question Six: What are the challenges associated with automated cataloguing system in academic libraries in Oyo State Nigeria.

Table 7: Challenges facing automated cataloguing in academic libraries in Oyo State Nigeria

| S/N | Items | *Frequency | Percentage |
|-----|---------------------------------------|------------|------------|
| 1 | Low level of Computer skills of staff | 36 | 92.3% |
| 2 | Inadequate space | 31 | 79.5% |
| 3 | Inadequate computer | 30 | 76.9% |
| 4 | Low bandwidth | 32 | 82.1% |
| 5 | Power outage | 39 | 100% |

***multiple frequency**

Table 7 shows the challenges facing automated cataloguing in academic libraries in Oyo State Nigeria. Power outage ranked highest among the challenges facing automated cataloguing in the libraries with 39 (100.0%) respondents. This was closely followed by low level of computer skill of staff, 36 (92.3%) respondents. 32 (82.1%), 31 (79.5%) and 30 (76.9)% respondents indicated that low bandwidth, inadequate space and inadequate computer were some of the challenges facing the use of automated cataloguing system.

Discussion of the Finding

The finding of this study revealed that automated cataloguing system in the libraries made the cataloguing work to be faster and easier. This could have a positive impact on the productivity of staff and efficient service delivery in the library. This study is in line with the study of Egbailenamhe and Japhet (2014) who reported that automated cataloguing system made cataloguing operations faster and easier.

Also, the finding of this study revealed that automated cataloguing system did not allow sharing of resources effectively among the various academic libraries in Oyo State Nigeria. The respondents 39 (100.0%) indicated that libraries were not sharing resources among themselves in Oyo State Nigeria. This showed that the libraries are not benefiting maximally in the sharing of resources among themselves. This study disagreed with the study of Hussaini, Vashistha, Jimoh and Jimah (2017) who reported that libraries were able to share, network and create databases at national and international levels. The reason for this disagreement could be because of location factor. This study was carried out in Oyo State Nigeria while their' were carried out in Ahmadu Bello University, Zaria Nigeria.

Conclusion and Recommendations

The study evaluated automated cataloguing system in academic libraries in Oyo State Nigeria. The results of the study revealed that majority of the objectives of setting up automated cataloguing system were meant in the institutions. This shows that automated cataloguing system is very useful for academic libraries in their day to day operation. Therefore, the study concluded based on the benefits involved in automated cataloguing system, that libraries should not only automate their cataloguing system but also automate all the library functions. Hence, the study recommended that all public and special libraries should key to library automation. The library administrators should provide adequate information technology tools for library automation. In addition, the libraries should share information resources among themselves to maximize more of the benefits of library automation.

References

- Boateng, H., Dzandu, M. D and Agyemang, F. G. (2015). The effects of demographic variables on knowledge sharing. *Library Review*, 64 (3). 216-228, <https://doi.org/10.1108/LR-07-2014-0080>
- Chukwuemeka, A., Oriogun, C. D., Daniel, O. and Ogbuiyi, D. C. (2015). Influence of Automated Cataloguing and circulation systems operation on library services in three selected university libraries in South Western Nigeria, *International Journal of Advance Research in Science and Engineering*, 6 (9). 572 – 580.
- Egbailenamhe, O. D. and Japhet, A. A. (2014). Issues, benefits and challenges of original cataloguing versus copy cataloguing: The experience at the Lagos State University. *International Journal of Library and Information Science*, 6(5), 88-97.
- Hussaini, S., Vashista, R., Jimoh, A. O. and Jimah, H. (2017). Automation of library services for enhanced users' satisfaction of information resources in academic libraries in Nigeria. *International Conference on Recent Innovations in Science, Engineering, Humanities and Management*, 150 -158.
- Kari, K. H. and Baro, E. E. (2014). The use of library software in Nigerian University Libraries and challenges. *Library Hi Tech News*, 31(3). 15-20, <https://doi.org/10.1108/LHTN-09-2013-0053>
- Ogunmodede, T. A., Nwokocha, N. M. and Apata, M. E. (2014). Influence of Automated Cataloguing System on Manual Cataloguing System in the Library: a Case Study of Selected Academic Libraries in South-West, Nigeria. *Information Technologist*, 11(2).
- Sarah, D. T. (2012). WHAT is evaluation? *Evaluation Trust*. <http://www.evaluationtrust.org/evaluation/evaluate>. Retrieved 13 May 2012.

Uzomba, E. C., Oyebola, O. J. and Izuchukwu, A. C. (2015). The use and application of open source integrated library system in academic libraries in Nigeria: Koha example. *Library Philosophy and Practice* (e-journal). <http://digitalcommons.unl.edu/libphilprac/1250>