Relevance and Use of Online Public Access Catalogue (OPAC) in University Libraries in North Central Nigeria

Abdullahi Shaba Mohammed\textsuperscript{1} and Katamba Abubakar Saka\textsuperscript{2}
\textsuperscript{1}AUST Library, African University of Science and Technology, Abuja
\textsuperscript{2}Department of Library and Information Technology, Federal University of Technology, Minna, Nigeria
\textsuperscript{1}shabakatcha@gmail.com, \textsuperscript{2}s.katamba@futminna.edu.ng

Abstract—OPAC is an acronym of Online Public Access Catalogue and it is an online database of holdings in a library or group of libraries whereby users search catalogue to locate variety of information resources such as books, monographs, serials, theses, audio visual material and other information resources. OPAC enables user to have easy access to holdings in library or group of libraries thereby saving the time of user. The study investigated the relevance and use of online public access catalogue in universities of Jos, Ilorin as well as African University of Science and Technology, Abuja. Three research questions were formulated to include variables such as relevance, use and challenges. Descriptive survey was used with population of 24,033 users (undergraduate and postgraduate students and faculty members). Stratified sampling technique was used to select 377 users. Four point likert scale questionnaire was used in data collection. Mean and standard deviation was used to analyze data. Findings showed that OPAC was relevance in the use of mobile phone and computer system to access information resources as well as for academic and educational purposes. OPAC was used to access e-journal/books and to determine the existence of document on shelf. Inadequate ICT skills, lack of awareness of website addresses and indifference of library staff were the challenges in the accessibility and use of OPAC. Recommendations were proffered e.g. management of university libraries operating OPAC should provide more computer systems for easy accessibility to information resources in university libraries in North Central, Nigeria.

Keywords—relevance; accessibility; use; users; OPAC; university libraries; north central; Nigeria

I. INTRODUCTION

An organization, institution or establishment usually consists of various information systems. These systems include archives, museums, libraries, information centres, media centres, Information and Communication Technology, etc. Library is considered as one of the information systems that is charged with the responsibilities of acquiring, processing, organizing, storing, preserving and disseminating information resources to users on request. Libraries acquire and store vast amount of information resources and can only be accessed if they are well managed and packaged. However, the exponential growth or rapid increase in the published and unpublished materials which was caused by continuous researches and development has created that problem of not only identifying what has been published in a given field of knowledge but also getting access to the needed information\textsuperscript{[1]}.

In order to resolve this conflict, bibliographic control mechanisms need to be put in place. This is a systematic recording of published and unpublished information resources in whatever format. One of such mechanism the “Library Catalogue” and hence Online Public Access catalogue according to [2] is “a computer form of library catalogue to access materials in the library with ease and thus it is the database of the collection of a library or group of libraries whereby users search catalogue, access and retrieve information/information resources with ease and time-saving”\textsuperscript{[3]}. This is a computerize version of manual catalogue which allow user’s access to information resources via internet using author, title, subject, etc as access points.

OPAC can be used as means of getting access to library collection that are not only online but also those that are physically on the shelves. Despite the penetration of ICT in every facets of human life including librarianship most libraries in Nigerian are yet to implement or embrace the use OPAC as information retrieval device and few academic libraries that are using the technology we faced with some challenges.

This study was confined and limited to only three university libraries (Jos, Ilorin and AUST Abuja) that are operating Online Public Access Catalogue (OPAC) as at the time of this research. Location of other universities financial and time constraints and non-operation of OPAC in the other university library in north central Nigeria as limited the study to these three university libraries.

II. STATEMENT OF PROBLEM

Every library is expected to packaged and manage its collection in the form of cataloging. In this era of ICT it is expected that academic libraries adopt the use of OPAC so that users can effectively exploit information resources.

Unfortunately it has been discovered that users encountered problems of accessing information in the course of using OPAC. One begin to wonder what has been responsible for his negative situation. This study is to
investigate the relevance and use of OPAC in three university libraries in the North Central Nigeria.

III. RESEARCH QUESTIONS

The following research questions were formulated to guide the study.

- What is the relevance of OPAC in the accessibility and use of information resources in university libraries in North Central Nigeria?
- What is the purpose of using OPAC in university libraries in North Central Nigeria?
- What are the challenges discovered in the accessibility and use of OPAC in university libraries in North Central Nigeria?

IV. LITERATURE REVIEW

In a study on the use of OPAC among student of sociology at the University of Botswana, in a research, [4] reported students' search for library collection has the major reason for using OPAC. A study conducted by [5] to determine the availability and accessibility of information sources to undergraduate students through distance learning programme in University of Abuja. Variables studied include availability, accessibility and barriers to access information resources. Questionnaire was used in data collection. Results showed that the availability and accessibility of textbooks, journals, newspapers, dictionaries, attribute, encyclopedia, seminar papers, Compact Disk-Read Only Memory, internets and telephones, Majority of the respondents indicated lack of public libraries in Abuja metropolis city as a major barrier to access information sources among distance learning students.

A study was conducted by [6] on OPAC use at Guru Nanak Development University Library, Punjab with emphasis on the awareness, frequency of use and level of satisfaction. It was discovered that majority of OPAC users were able to locate information through OPAC although users were not satisfied due to difficulties and encountered in a bid to search, access and locate information through OPAC.

An empirical study was conducted by [7] to determine the internet access and use among undergraduate students of Godfrey Okoye University, Enugu. Questionnaire was used in data collection while frequency counts and percentages was used to analyzed data. Results showed that almost all respondents indicated that their departments were connected to the internet and thus have access to the internet through mobile phones. Study further revealed that academic/educational purposes advanced for using internet by undergraduate students.

In a related study [8] investigated the use of OPAC by users of John Harris Library, University of Benin. The study was aimed at investigating the access point of OPAC to card catalogue and the challenges involve in the use of OPAC. Closed ended type of questionnaire was used Result showed that access point was mostly through title, author and subject and that skills were acquired during orientation programme and teaching of a course on the use of library.

An investigation on the effects and challenges in the use of OPAC in Kenneth Dike Library, University of Ibadan and University of Lagos Library, Nigeria was carried out. Questionnaire was the only data collection instrument used, while descriptive statistic was used to analyze data. Result showed that OPAC allow users to search information resources outside the university and offers two or more users accessed to the same electronic resources [9].

V. METHODOLOGY

Descriptive survey was adopted while the population consisted of 24,033 users drawn from three University libraries in North Central Nigeria. These Universities include; University of Jos, African University of Science and Technology, Abuja and University of Ilorin and are the only three university libraries that are operating and implementing OPAC system as at the time of this research. However, postgraduate students in Universities of Ilorin and Jos did not register with the university libraries as OPAC users. The PG students are also expected to register with the universities’ OPAC websites before been considered as OPAC users. Registration with university libraries as library users is different from registration as OPAC users. The population of registered PG students with OPAC website cannot be determined in this study because the PG students’ from universities of Ilorin and Jos did not registered with university libraries OPAC websites. The same situation exist on the part of faculty members of the two universities.

Table I spelt out the population of users of OPAC in the three university libraries.

A sample size of 377 OPAC users was selected using stratified sampling technique and it involves dividing population into layers (strata) using 50%, 45% and 5% respectively based on the population of each university library OPAC users.

Four point likert scale type of close-end questionnaire (strongly agree, agree, disagree and strongly disagree) was used in data collection [10] and [11] such that mean score was used to analyzed the likert scale questionnaire. The modified version of the likert type of questionnaire was in first instance subjected to validity and reliability. The reliability co-efficient of 0.72 was obtained from split half method of pilot study. Modified copies of questionnaire were administered on 377 users of OPAC.

Analysis of data was carried out using descriptive statistics involving mean and standard deviation to answer research questions. A mean score of 3.0 and above is considered as an acceptable mean while below 3.0 is rejected mean.

VI. DATA ANALYSIS AND INTERPRETATION OF FINDINGS

Out of the 377 copies of questionnaire administered, 299 copies representing 79% were filled and returned in usable form.

From table two and based on the response rate of 299 respondents, the highest respondents were from University of Ilorin and were undergraduate students. This showed that this category of users used OPAC in most cases to access the needed information. The lowest respondents were from African University of Science and Technology, Abuja which might be attributed to the fact that the university offer postgraduate programmes only.
From Table III, it was discovered that highest mean of 3.6 was obtained from the item on OPAC provision to access electronic information through mobile phones and computer system. Thus, majority of users do access information and information resources through the use of computer as well as browsing through their phones. Closed related to this was pre-browsing through library web address with a mean score of 3.4. Before user browse, he/she must first of all access the university library web site. However respondents could not agree with the statement on accessibility to information outside the university environment as it revealed the mean score of 2.1. Outside the university environment neither network nor OPAC can be used/ accessed.

From Table IV, the first two items had mean score of 3.6 revealing that respondents used of OPAC were to access e-journals/books to meet research needs as well determining the existence of printed document on shelve. All these are geared towards meeting.

From Table V, respondents indicated that the three items were accepted thus with the mean scores of 3.5, 3.4 and 3.3 meaning that uses lack ICT skills, were not aware of library website addresses and that attitude of library staff was not encouraged. All these problems affect the level of accessibility to information resources.

<table>
<thead>
<tr>
<th>S/N</th>
<th>UNIVERSITY</th>
<th>Freq</th>
<th>(Percentage %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University of Ilorin, Ilorin</td>
<td>167</td>
<td>56%</td>
</tr>
<tr>
<td>2</td>
<td>University of Jos, Jos</td>
<td>122</td>
<td>41%</td>
</tr>
<tr>
<td>3</td>
<td>African University of Science and Technology, Abuja</td>
<td>10</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>299</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>Operator</th>
<th>Agreement</th>
<th>Disagreement</th>
<th>Standard Deviation</th>
<th>Mean ± SD</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OPAC provides access to electronic information via mobile phone and computer system</td>
<td>48</td>
<td>222</td>
<td>11</td>
<td>18</td>
<td>3.6 .824</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>OPAC allow accessibility outside the University environment</td>
<td>151</td>
<td>19</td>
<td>72</td>
<td>57</td>
<td>2.1</td>
<td>.125 Rejected</td>
</tr>
<tr>
<td>3</td>
<td>OPAC allow pre-browsing through the University Library web address</td>
<td>32</td>
<td>21</td>
<td>42</td>
<td>204</td>
<td>3.4</td>
<td>.013 Accepted</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>Operator</th>
<th>Agreement</th>
<th>Disagreement</th>
<th>Standard Deviation</th>
<th>Mean ± SD</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To access e-journals/books to meet research needs</td>
<td>225</td>
<td>40</td>
<td>26</td>
<td>8</td>
<td>3.6 .758</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>To determine the availability of particular printed document on shelve</td>
<td>209</td>
<td>64</td>
<td>19</td>
<td>7</td>
<td>3.6 .715</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>To determine the collection strength of a library by subject, another and title</td>
<td>158</td>
<td>99</td>
<td>41</td>
<td>1</td>
<td>1.7</td>
<td>1.010 Rejected</td>
</tr>
</tbody>
</table>

VII. Discussion of Major Findings

Four research questions were formulated and were used to obtain data from the respondents.

The research question one was used to obtain responses on relevance of OPAC to information accessibility and use the popular item discovered was that OPAC allow access to information through mobile phone and computer system. With the current trends, libraries in developed nations are using OPAC by which mobile phones and computer system connected to internet are now used to access the needed information. This finding corroborates the research findings that departments in University of Abuja were connected to internet and accessibility was made easier through mobile phones. This was also supported by research finding that reported OPAC as tool that enable users search information resources outside the university environment.

Research question two sought to find out the purpose of using OPAC in the three university libraries operating this system. The response showed that OPAC was used to access e-journals and books to ascertain the existence of document on shelve each with mean score of 3.6. Responses to the two items were positive and accepted as users search for documents to meet their information and research needs. This finding corroborates the findings that reported the availability and accessibility to textbooks, journals, newspapers, dictionaries, etc, while the later researcher reported that the purpose of using OPAC was because of academic/educational purposes. These findings was further supported by research report revealing the search for library collection by students was the major reason for using OPAC.
The third research question sought to find answer to the challenges involved in the accessibility and use of OPAC in the three university libraries in North Central Nigeria. Lack of adequate ICT skills, awareness of University Library website addresses and attitude of library staff were discovered and accepted as serious challenges. All the three challenges has adverse and negative effect on the level/degree of information accessibility and use. This finding corroborates the findings on the study that revealed users’ inability to locate information but associated with some challenges most of which were parts of the ones reveal by the present findings on table five. The present findings however disagree with the finding of collaborative study that reported absence of public libraries in Abuja metropolitan city as the major obstacle to information accessibility among undergraduate students of distance learning programme.

VIII. SUMMARY OF MAJOR FINDINGS

Based on the interpretation of data, the generalization of the study was based on the three university libraries operating OPAC in north central Nigeria and the major findings are summarized below:

- Relevance of OPAC was that mobile phone and computer system were used to access information resources
- Access to e-journals and books and to determine the existence of document on shelf as well as meeting the academic and educational need where the purpose of using OPAC
- Constraints to the accessibility and use of OPAC include: inadequate ICT skills, lack of awareness of university library websites and indifference of library staff.

IX. CONCLUSION AND RECOMMENDATIONS

From the research it can be deduced that mobile phones and computer systems were the common ICTs in the world now. However information resources can exist in both print and electronic format while accessibility to both can be by OPAC. Users’ ICT level was low and the resultant effect is the inability to access the needed information at the right time:

Registered OPAC users can use the mobile phone at their door step, browse, locate and retrieve the needed information and materials through various access points.

However, from the review of empirical study, it was discovered that found that OPAC allow user to search information resources outside the university environment whereby it is possible to locate both authors, title ISBN, ISSN and other bibliography details at the same time.

Manuscript review show that OPAC users locate information with difficulties and the major reason for using OPAC was to search for library collection

Based on these facts, the study recommends that:-
- The management of university libraries operating OPAC should improve upon the system by making provision for more computer systems in the university libraries.
- Management of university libraries in the zone should ensure that there is subscription to e-resources.
- Management of university libraries operating OPAC should organize regular training/workshop for users to be proficient in ICT skills and create awareness in the area of website addresses. The library staff should be made to have positive change in attitude in the areas of challenges and information needs.

REFERENCES