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ONLINE PUBLIC ACCESS CATALOGUE [OPAC] IN NIGERIAN LIBRARIES: A CASE STUDY OF THE KENNETH DIKE LIBRARY AND UNIVERSITY OFLAGOS LIBRARY

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Abstract: This research work examined the effects and constraints of Online Public Access Catalogue (OPAC) in Nigerian Libraries: A case study of Kenneth Dike Library and University of Lagos Library. The research design is a case study and data was gathered from randomly selected students over a period of one week. Out of a total of 200 questionnaires used, a total of 190 were—returned out of which 164 were found useful. Frequency counts and simple percentage were used to analyze the data. The findings of the study showed that the major effects of OPAC is that it allows users to search the library's collection from location outside the library walls; it provides users with timely access to library materials; it encourages cooperative collections development and resource sharing and power failure was also indicated as one of the numerous problems facing the utilization of OPAC in Nigeria Libraries. From the findings of the study, conclusions and recommendations were made.

Keywords: OPAC, Automation, Libraries, Online Catalogue, University.

INTRODUCTION

In any human setting, it is usual to organize objects that are within one's environment, especially those that are frequently used. This is to facilitate easy retrieval whenever the objects are needed. This is the principle of organization. If there were no prior organization of objects, it would be difficult to retrieve a particular object from among the various objects in the collection when needed. This is why it is important to organize files, books and equipment etc. in offices. Similarly, different information carriers which are normally acquired and stored in the library for use must be organized in order to facilitate easy retrieval when the users of a library want them. Libraries normally acquire a large number of information carriers. In large libraries, they can run into millions of different information carriers. There are many retrieval tools for accessing documents in a collection. The retrieval tools contain surrogates of information carriers stored in a collection that is the substitute of the actual documents. They

facilitate easy retrieval of documents within a collection. Retrieval allows users to peruse and select the necessary documents required.

Among the 20th century's grandest information technology accomplishments was the transformation of the library card catalogue into the Online Public Access Catalogue. OPAC (Online Public Access Catalogue) is an online bibliography of a library collection that is available to the public. It is a computer based catalogue and can be accessed through computer terminals in a library. It can also be defined as a computerized database of a library's holdings. Guha and Saraf (2005) reported that the Online Public Access Catalogue (OPAC) in its very rudimentary form first emerged in the late –1970s and early 1980s, subsequently going through several generations of development. Prior to the emergence of OPAC, for users to find information about any item in a library collection, they must flip through or search a collection of catalogue cards in a filing cabinet using appropriate access points for known items. Where the item is not known, the subject catalogue is used. This therefore makes the search exercises a cumbersome one, time consuming and usually slow. The adoption of technology into library operations has swept off all of this, and users can get the bibliography details, call mark and location of titles in the library at the click of a mouse.

It is important to reiterate that the aim of cataloguing materials is to create and organize information, so as to promote access and use of information, and catalogues are often based on the physical location of items in the library. The basic purpose of library automation software is to help in creating a database of library holdings, which will, in turn, provide an online catalogue to help the users in identifying and locating their required documents. The present trend is that these artefacts are also supporting the web-OPAC facility, by which the library catalogue can be browsed over the internet by graphical browsers. It presents the library catalogues in a hypertext format, which can be linked to the full-text electronic resources. These interactive web-OPACs allow the users to access various resources of other libraries, publishers, online vendors, etc. connected to the internet. Though most libraries in developed countries automated their systems way back in the early and mid-1980s, libraries in Nigeria did not join in the automation movement until recently, even at that, only a few is fully automated.

Traditionally, the book catalogue was the only form of catalogue as the book catalogue was handwritten and later graduated to printed format. Small libraries are still utilizing book catalogue not only because it is very cheap but because it is difficult to insert records of new books due to its flexible nature, people started thinking about how to improve upon it by introducing the computer output microform [com] catalogue, the CD Rom catalogue and the OPAC. Prior to the 1970s, library automated systems were dedicated to a single function designed for a single purpose operation. The circulation functions was the first library operation to be automated due to its repetitive, routine and time-consuming multifaceted tasks e.g. check-in, check-out, fines, overdue notice, and record keeping. In the late 1970s and early 1980s, vendors of automated systems introduced the OPAC function to existing circulation system. However, it must be noted that an OPAC is one among the myriads of components of Library Automation. Library Automation can be conceptualized as a system of manufacture designed to extend the capacity of machines to perform certain tasks formerly done by humans, and to control sequences of operations without human intervention. The term automation has also been used to describe nonmanufacturing systems in which programmed or automated devices can operate independently or nearly independently of human control. Online catalogues were introduced in libraries long before computers were widely implemented in schools, work place, and homes. While several experimental online catalogue existed in the 1960s and early 1970s, it is generally acknowledge that the first large-scale implementations were at Ohio State University in 1975 {Miller, 1975} and the Dallas public library in 1978. By the early 1980s, a sufficient number of online catalogues study were in place in the United States for Council on Library Resources to commission a major study of online catalogue usages. Time sharing systems appeared in the 1960s and hobbyist personal computers in the late 1970s {Press, 1993}, but the large-scale desktop computing is a 1980s phenomenon - the IBM personal computer was introduced in 1981 and the Apple Macintosh in 1984. Only in the Last few has it become personable to assure that many library users in the West are familiar with computers. In other parts of the world, where online catalogues are being introduced in societies with far less information technology in place, we cannot make this assumption. For many people, libraries will continue to provide their first encounter with computers.

The University of Lagos was founded in 1962 and is made up of two campuses, the main campus at Akoka, Yaba and the College of Medicine in Idi-Araba, Surulere. The University has nine Faculties and a College of Medicine. The Faculties offer a total of 117 programmers in Arts, Social Science, Business Administration and Education. The University of Lagos library management agreed to migrate from TINLIB to GLAS software in 2000. This software made possible the creation of cataloguing database at the University of Lagos Library, thereby giving birth to the computer based catalogue popularly known as OPAC.

The University of Ibadan library system consists of the main library (Kenneth Dike Library), 7 Faculty Libraries and 28 departmental/institute libraries. Its main branch library, the E.LatundeOdeku Medical Library, is located at the College of Medicine, 8km away from the university campus. The faculty libraries are: the Agriculture and Forestry; Education; Law; Pharmacy; Social Science; Technology and Veterinary Medicine Faculties. In keeping with the global trend, Kenneth Dike Library (KDL) started automation in 1980s experimenting with serials. This was done in collaboration with the university computing centre. That effort produced a long list of dot matrix computer printout. From that modest beginning, the library has made several attempts at computerization. In 1993, the library adopted CDS/ISIS software that was developed and distributed freely by UNESCO. Then,TINLIB, a library management software was acquired in 1994. It was discovered afterwards that the software was DOS-based, lack flexibility and incapable of performing the advanced function required for delivering smooth library services.

Then in 2008, with the approval of the university administration and in conjunction with (5) other federal university libraries that are supported by the Carnegie and MarArthur Foundations, KDL signed up with Visionary Technology for library Solutions (VTLS) Inc. To join the growing networks of libraries that are deploying the VIRTUA Integrated Library System software. In doing this, the library made the necessary preparations and drew up a workplan. Virtua is a highly versatile software that is internet- based. It is modular and integrated, flexible, user friendly, customizable and time – saving. Since it is fully deployed the users, now have access to bibliographic records online using OPAC as a platform. This translate to the facts that, the Online Public Access Catalogues (OPAC) can be remotely accessed from any location 24/7 so long as there is internet connection at the location.

Literature Review

The use of ICT has brought about significantly different products and services in the library. Services currently available in the library differ significantly from those offered in the past. No wonder Eyitayo (2009) opined that information professionals should move their catalogues from manual to automated system because users have limited time searching the card catalogue for it is usually tedious and their attention is relatively scarce. Today's library users are in need of timely access to relevant information and information sources. Without any reasonable doubt, one can state that the main duty of the library is to use every techniques of modern science to accelerate access to printed books and other information sources. All of these attempts is described as library automation and this has made many library operations such as acquisition, circulation, bibliographic compilation and literature search easier and much more efficient. It has also made some other services possible for the very first time. AinaandZaid (2004), emphasized that library automation offers many opportunities to improve library services. Furthermore, Aina(2004) opines that OPAC is the most modern and most efficient form of catalogue because is possesses all the advantage of other forms of catalogues due to its flexibility. According to him, he said it is also possible to access the records through several points; it doesn't occupy too much space and can be provided in many places. You just need a microcomputer with a large memory in order to operate it successfully and it can easily be updated. He however fails to point out its disadvantages.

Historically, libraries have had one form of catalogue or another; ranging from a mental list in the mind of the librarian, to book catalogues, card indexes etc. These catalogues have existed to guide library users through the collection they wish to use. With the evolution of Online Public Access Catalogs (OPAC) which is a networked, universally accessible entity, it became possible to access the library collections without pulling the drawers of three by five cards. [Butterfield, 2003]

A search through Literature revealed that much study had not been conducted on the use of OPAC particularly in Nigeria. However, studies conducted outside Nigeria include that of Peters who in (1991) reported that users believed that the online catalogue is fast and easy and they preferred online catalogue to card catalogue. Users also need more terminals to do their work independently and that they conduct more subject searches than any other type of search. Markey (1985) in his analysis of participants' remarks on patrons' needs and perception of OPAC reiterated that users of OPAC like this new form of the library catalogue and want access to much more than books. He also reported that there are positive aspects of the traditional catalogue that library patrons and staff would like implemented as features of the online catalogue.

Fattahi (1995) in his comparative study of online and card catalogues concluded that the interactive online catalogue has a lot of advantage in terms of content, structure, searching capabilities and user satisfaction. Morrupisi and Mooko (2006) in their study on the use of the online public access catalogue (OPAC) at the University of Botswana

by sociology students revealed that searching the library collection is student's major reason for using the OPAC. Their study also revealed that students do not have many problems searching the OPAC.

On the other hand Adedibu (2008) in his study on catalogue use by science students in the University of Ilorin found out that the card catalogues and the OPAC, the most essential library tools in accessing the library collection, are not always consulted because of inadequate knowledge of how to use them. On Ampka's (2000) study on the use of University of Maiduguri Library found out that majority of students did not use the library effectively due to lack of interest on the use of library catalogues.

Benefits of library Automation and the Effects of OPAC on Nigerian Libraries

The web is making library automation the 'norm' for all type of libraries. Any media center or library that is seeking to establish a presence on the web must have its catalogue automated. What is most evident about library automation is that it improves library services and increases productivity, efficiency, and accuracy in performing a variety of library operations.

Without OPAC, there wouldn't have been library automation and eventually easy and timely access to information. OPAC adds a layer of functionality by providing more techniques for searching the same date. Some of the positive effects of OPAC in Nigerian libraries are highlighted below:

- It allows patrons to use search strategies that exceed those that can be used with card catalogs. Card catalogs can be searched only by author, title and subject; OPACs can be assessed by author, title, subject, and keyword. In addition, users can extend their search by using Boolean operator (AND, OR, NOT) and by combining search strategies (e.g., title and author, subject and author). In addition, OPAC users may limit their search result by such features as publication date, type of material (e.g., magazines,book,video), language, or readinglevel, and they can sort by author, title, and publication date.
- The windows-based OPAC allow for hyperlink searching and this is a new feature that was not possible in character based system. Through hyperlink search, a user can find related records in the automated system's database under a word or subject. The user can also locate related resources that appear on the web via the MARC. Another search feature that was not possible in character-based systems is the visual search. An OPAC that has a Graphical user Interface (GUI) capability allows users to click on icons that represent function instead of clicking on command buttons only. The visual representation of search function is very attractive to young children especially because visual interfaces that are based on pictures or icons are usually argument with colors and easy-to read text.
- It allows users to search the library's collection from locations outside the library walls. Patrons who are
 equipped with a computer and a modern can dial into the OPAC from home, an office or another remote
 location. Using the 239.50 standard allows users to search OPAC on the web using common interfaces
 and/or search features.
- It supports new means of information retrieval by introducing patrons to global information. The popularity and success of OPAC make them ideal to coexist with CD-ROM databases, online databases, the web and other information systems on a library's computer. A 239.50 compliant OPAC allows users to search 239.50 complaints databases using the search syntax of the OPAC, thereby eliminating the need to learn each databases's search syntax.
- OPAC also provides users with timely access to library materials. Materials can be placed on shelves as soon as items are processed and MARC records are downloaded into a database.
- It encourages cooperative collection development and resources sharing [e.g. inter library loan]. Automated media centres and libraries can developed a union catalogue and join bibliographic utilities and consortia. A user who does not find an item of interest in the library's local OPAC may identify the libraries in the union catalogue or consortia that have it. The user can then borrow the item through interlibrary loan or by checking it out from a designated library.
- It motivates patrons, equips them with problem solving and information retrieval skills, and provides
 them with lifelong learning experiences. In addition, it reinforces a positive attitude about the media
 centre or library and improves the image of the media specialist or information professional. Using
 OPAC can be friendly because information about all books published by an author can be accessed at a
 time as long as it networked together.

- It allows patrons to use search strategies that exceeds those that can be used with card catalogue. Card
 catalogue can be searched only by author, title and subject. OPAC can be accessed by author, title,
 subject and keyword.
- Search for library materials using many options such as author, title, subject and call number.
- Find details status about an item such as its availability, number of copies, and its location within the library.
- Place a request on a book that is currently on loan to other borrowers.
- Check the borrower's account to get information about number of items on loan, amount of overdue fines (if any) and other transactions the patrons has with the library.

All OPAC use a keyboard to communicate with the computer rather than the mouse, graphics pad or touch screen. The most frequent method of interacting with the OPAC is by the use of the menus. Access to the bibliographic record is possible through a large number of access points such as author or corporate name, title, keyword search, subject heading, ISSN and call mark. In addition, users can extend their search by using Boolean Operation {AND, OR, NOT} and by combining search strategies {e.g. title and author, subject and author}. In addition, OPAC users may limit their search results by such features as publication, type of material {e.g. magazine, book and video}, language, reading level and they can sort bibliographic by author, title, and publications date.

OPAC Constraints in Nigerian Libraries

Despite the attention that OPAC is receiving worldwide, little seems to have change. Research studies continue to report that users have great because their design does not incorporate sufficient understanding of searching behavior. Research in information seeking indicates that users formulate questions in stages gradually coming to the point where they can begin to articulate a query.

Online catalogue technology has kept with pace with expectations for ease of use or functionality, resulting in calls for a return to the trusted card catalogue {Baker 1994}. Many of the problems that remain in online catalogue are due to the remnants of the card catalogue in its structure and a failure to design user interfaces based on the knowledge and skills of online catalogue users. Though the online catalogue adds a layer of functionality, it also adds a layer of complexity to the process. Compared to the rich access systems a services of the commercial sector, several aspects of law library services fall short. For example, most libraries Online Public Access Catalogue (OPAC) fails to provide information in a helpful way to users. OPAC searches include only a fraction of the library's resources. Library patrons, familiar with sophisticated commercial Web business expect more now from their library, as well. They expect that library catalogues will work as well as amazon.com's website, and that they will find as much relevant material improvements in OPAC are in surface features rather than in the core functionality. We see little evidence that searching behavior has influenced online catalogue design.

Some of the following problems are facing the utilization OPAC in Nigeria libraries:

- It is costly: Startup cost, software, network cabling, wiring and software; furniture etc. and even maintenance is expensive and unaffordable due to the poor state of most of Nigerian libraries.
- Power Failure: The issue of inadequate power supply is greatly affecting access to information in Nigeria libraries. The use of generating set should be an alternative but surprisingly, most organization uses it as a major source of power. Because of poor state of some public libraries in Nigeria and the lack of sponsorship on the part of Government unlike before, most libraries cannot afford to procure a powerful generator.
- Copyright Issue: Because information can be accessed anytime, anywhere through the online catalogue, users are abusing this privilege. They copy and download information without acknowledging the author. This is another constraint.
- It is time Consuming: OPAC design is sophisticated to the extent that users find it difficult to understand. The technophobia for instance may not find the use of OPAC easy because ordinarily they hate having contract with the computer.

- Consistent system breakdown: If there is a system breakdown, access to information will be difficult. If the card catalogue or the shelf list no longer exists in the media centre or library, it will be difficult to get any information. This is why people are clamoring that the OPAC and the card catalogue should be used together in libraries so that if there is failure in one, the other will work.
- Inadequate Manpower and lack of committed personnel: Since the OPAC system is a new design, getting adequate manpower to maintain its functionality and operation is difficult in Nigeria libraries. In addition, committed personnel are few in most centres especially in public media centre/libraries, because of their belief that it is government job. This can discourage good patronage to the centre.

Statement of problem

The adoption of the Information and Communication Technology (ICT) has led to the automation of library operations. This has made users have access to a library's holdings by typing their request at computer terminals provided in the library. Since the inception of the Online Public Access Catalogue (OPAC) in the library, no study has been carried out to assess the effect (in this case benefits) and the constraint of using the OPAC among library users hence this study.

Objectives

- 1. To ascertain how library users learnt how to use the OPAC
- 2. To determine the effect of using the OPAC among library users
- 3. To determine the constraints of using the OPAC among library users.
- 4. To determine how often they encounter problem and the actions taken at such times.

Research questions

- 1. How did the library users make use of OPAC?
- 2. What are the effects of using OPAC among library users?
- 3. What are the constraints encountered by library users when using OPAC?
- 4. What are the problems encountered and actions taken at such time in making use of OPAC?

METHODOLOGY

The study is targeted at undergraduate students of the Kenneth Dike Library and University of Lagos who are library patrons. Theseinstitution was chosen because of the remarkable attempt made in automating the library. A self-developed questionnaire was used to gather data for the study. The instrument was subjected to face and content validity. The research design is a case study and data was gathered from randomly selected students over a period of one week. A total of 200 students participated in the study. Data gathered were analyzed using percentages and frequency counts.

Rate of return of questionnaire

Out of a total of 200 questionnaire used, a total of 190 was returned out of which 164 were found useful. This represents 82% return rate.

FINDINGS

Table 1: Distribution of Respondents by Gender

Gender	Frequency	Percent
Male	132	80.50
Female	32	19.50
Total ·	164	100.0

Table 1 above revealed the distribution of respondents by gender. The study revealed 132 (80.50%) are male while 96 (19.50%) are female. This shows that majority of the respondents that constitute the target population for this study were male.

Table 2: How students learnt how to use the OPAC

Response Option	Frequency	Percent	
During library orientation	16	9.80	
From a friend	52	31.70	
From the help menu on OPAC	26	15.85	
From another user	46	28.10	
No response	24	14.63	
Total	164	100.0	

Table 2 above revealed that most of the students that is 52 or (31.70%) claimed that they learnt how to use the OPAC from a friend, 46 or (28.10%) learnt how to use the OPAC from another user while 26 or (15.85%) claimed that they learnt how to use the OPAC from the help menu on the OPAC while 16 or (9.8%) claimed that they learnt how to use the OPAC during library orientation.

The result confirms that the students still need to be given a proper orientation on how to use the OPAC. This is a major issue that the Readers' services Department of the Library should look into.

Table 3: The effect (benefit) of using the OPAC

Statement	SA	A	Total	Mean	D	SD	Total	Mean
OPAC saves my time when searching for an item in the library	82	60	142	71	16	6 .	22	11
It is more convenient to use	76	74	150	75	12	2	14	7
It is faster than the manual catalogue	82	72	144	77	8	2	10	5
It facilitates easy access to library collection .	80	62	142	71	18	4	22	11
It reveals the status of the book e.g. it a book is on loan, available etc.	48	54	102	51	46	16	62	31
The OPAC gives the library a facelift i.e. is necessary in the information age	44	102	146	73	16	2	18	9
It has enhanced my ability to retrieve titles (books) from the library	60	76	136	68	22	6	28	14
It has reduced the level of frustration I have in locating materials in the library	68	58	126	63	. 32	6	38	19

Table 3 above revealed the effect (benefit) of using the OPAC. From the data gathered, 150 of the students agree that the OPAC is faster than the manual catalogue. 146 agree that OPAC gives the library a facelift i. e. a look that is necessary in the information age. This is closely followed by 144 of them who claimed that it is faster than the card catalogue.

Table 4: Constraints students have in using the OPAC

Statement	Yes	No
The computer systems are not enough	102	62
There is no privacy when searching the OPAC	88	76
The OPAC is not user friendly enough	58	106
There is no prior orientation before using the OPAC	100	64
I spend a lot of time waiting to use the OPAC	60	104
I am not computer literate	24	140
I have difficulty interpreting the retrieved records)	52	112
There is no library staff to assist me when I run into difficulty	101	63
I am unable to use appropriate search term.	62.	102
I often make typographical errors	28	136
There is erratic power supply	88	76

Table 4 above revealed the constraints students have in using the OPAC. 102 of the students claimed that the computer systems are not enough, 101 claimed that there is no library staff to assist them when they run into difficulty and 100 claimed that the there is no prior orientation before using it.

Table 5: How often students encounter problem when using the OPAC'

Response option	Frequency	Percent	
Always	12	7.32	
Very often	42	25.61	
Often	76	46.34	
Never	20	12.20	
No response	14	8.54	
Total	164	100.0	

Table 5 revealed that 76 (41.76%) of the students often encounter problem when using the OPAC. 20 (12.20%) never encounter problem, 42 (25.61%) encounter problem very often while 12 (7.32%) always encounter problem when using the OPAC.

Table 6: Actions taken by students when they encounter problem using OPAC

Response option	Frequency	Percent		
Ask a friend for help	64	. 39.02		
Seek assistance from another OPAC user	52	31.71		
Seek assistance from a library staff	16	6.10		
Ask those at the circulation desk for assistance	10	9.76		
No response	22	13.41		
Total	164	100.0		

A look into the actions taken by students when they encounter a problem using the OPAC is revealed in table 6. About 64 or 39.02% of students claimed that they ask a friend for help while 52 or 31.71% claimed that they seek assistance from another OPAC user. On the other hand, 10 or 9.76% ask those at the circulation desk for assistance.

DISCUSSION

The study was basically on the effects and constraints of using the Online Public Access Catalogue among the undergraduate's students. It was revealed from the study that majority of the students learnt to use the OPAC from a friend. It was also discovered that from all indications, majority of the students admitted that OPAC is much faster than the manual catalogue. This is in consonance with Peter (1991), who reported that the Online Catalogue is fast and easy and that is the exact reason why student preferred it the more. Majorities are also of the opinions that computers in the library are not enough, coupled with the shortage of staff to assist when it comes to using the QPAC. It was also revealed that most of the students encounter difficulty in operating OPAC and most of tens there friends usually comes to their aids inorder to bail them out. This finding is against the assertion of Morrupsi and Mooko (2006) in their study which revealed that students do not have many problems when searching or using the OPAC. It is clear from all these numerous assertions the need for the library management to wake up to their responsibilities and address all these challenges highlighted to guarantee the efficacy of OPAC.

CONCLUSION

The study has dealt with the effect and constraints of using the Online Public Access Catalogue (OPAC) among undergraduate students. The students agreed that the OPAC is faster than the manual catalogue. It gives the library a facelift i.e. a look that is necessary in the information age, and it is faster than the card catalogue.

The OPAC no doubt has given libraries a face lift, by not just improving her services but has given users timely access to library collections. The onus lie in the hand of the Reader services section of the University library to ensure that

- · The OPAC is available for use
- Students are taught how to use it
- And the constraints highlighted in the study are taken care of.

Critical issues for the attention of the Library Management

The following issues call for serious attention

- 1. Information literacy training for the students
- 2. Students should be taught how to use the OPAC during library orientation and a manual should be developed on how to use the OPAC and placed at the OPAC desk for consultation.
- Academic libraries should be well funded to enable them acquire library software that are capable of
 allowing them automate library operations particularly cataloguing and circulation with a view to launch
 their library catalogue on the web.
- 4. There should be a research into the available library software to discover the one that will be suitable for the academic libraries to provide the bedrock for forming a consortium to ensure inter library loan.
- 5. Provision of adequate computer terminals for students use at the OPAC desk so as to reduce the time students have to wait before using the system should be a priority.
- There should be provision for alternative power supply in the library to ensure uninterruptible power supply.
- 7. Academic libraries should ensure that the OPAC is web-based so that students can have access to the library database right from their rooms.
- 8. The library management should look for funding opportunities abroad, and
- 9. There is need for collaboration with academic libraries in developed countries to give the necessary assistance in terms of technical know-how in developing a fully computerized library.

10. The online catalogues must serve a population as information seekers that is heterogeneous in terms of age, language, culture, subject knowledge and computing expertise, most of whom will be perpetual novices at information retrieval.

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