

Restoring the Library OPAC towards Usability by Undergraduates Students of the University of Benin

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ABSTRACT

The University of Benin (Uniben) students have shown more desire in internet search than the Online Public Access Catalogue (OPAC). OPAC has been the most common tool for library users and librarians recently, and it will be also commonly used in electronic libraries. Google search engines have become the preferred tool over the library online public access catalogue for finding information. Few academic libraries in Nigeria can boast of OPAC system, while the few with the systems are losing ground to online search engines. Students and faculty are accustomed to the usability, flexibility, and performance of the internet best web applications when they logon into the Internet. This usability is preferable when compared to the libraries that have meager information resources as well as few search options in accessing the OPAC. This view point highlight the; current OPAC interface and searching capabilities, as well as a more modernized OPAC interface built on Web 2.0 which many academic libraries lack in Nigeria. The purpose of the study is to find answers to the current debate: Why is the Uniben OPAC ineffective? What can libraries, librarians and programers do to deliver an OPAC that is as good as search engines to better serve our users? The case study is on University of Benin Library state of the art, where their OPAC is less effective and cannot be built on the web.

Keywords: *University of Benin, OPAC, Academic Libraries, Search engines, Search options, OPAC Interface, Google*

1. INTRODUCTION

An information institution or a library tends to be prominent or popular for its organized rich collection and effective services. Organization of resources according to Islam (2011) is attained through cataloguing and classification. Classification is a part of cataloguing. As the trend continues to change for the good, technologies are employed to make access and retrieval of these information resources easy. The computer catalogue (Online Public Access Catalogue) which is one of these technologies, can in theory provide access to any of the information contained in the record for an item in the library. The development of Machine Readable Catalogue (MARC) in the 1960s made it possible to encode all areas of cataloguing record to be searchable. In MARC catalogue through which we now have Online Public Access Catalogue (OPAC), each piece of information in a catalogue is given a numerical code or field. This coding makes it possible for a computer program (library management software) to be written that looks for particular type of search, such as author, subject or title is requested. Because all of the cataloguing records are encoded, searches could optionally be done by ISBN, by

series, publisher, by date; or any of the pieces of information stored in the cataloguing record.

MARC has set the standard for all computer record used in libraries today. When library materials are catalogued in a careful and complete manner, access is provided for the library patrons and staff to all sources of information on a particular topic, by a particular author or in a particular format that the library possesses. The better the access, the more use the collection receives, and the more satisfied the patron is in his or her search for information in the library. The University of Benin library has an OPAC with four terminals made public for the library users. Consequently, the users access the library collections using the OPAC. The search options include the author, title and the subject. However, depending on the library management software, some OPAC can boast of many search indexes which include author, title, subject, series, ISBN (International Standard Book Number), ISSN (International Serial Book Number) and the publisher information etc.

Presently, the information-seeking behavior of academic library users has drastically changed in recent years.

According to a survey conducted and published by OCLC in 2005, approximately 89 percent of college students across all the regions that were included in the study (including areas outside the United States) begin their electronic information searches with Internet search engines (Cathy, 2007). More than half of U.S. residents used Google for their searches. Internet search engines dominate the information-seeking landscape. These findings are not far from Nigeria where many libraries are yet to fully get automated and access their holdings through the OPAC. The case is worse here because undergraduate students are more aware of the Internet than the OPAC which can primarily be found in few libraries. The only search engine they can claim to know is the **Google** search plus some few others like the **Lycos**, **Mamma** and **Alta** vista. Academic libraries are the ones affected most, because many college students are satisfied with the answers they find on the Internet for their assignments, and they end up not taking advantage of the many quality resources in their libraries.

For many years, before the Internet search engine emerged, library catalogues were the sole information-seeking gateway. Mi and Weng (2008) reveals in their studies that, just as the one-time industry giant Kodak has lost ground to digital photography, academic library OPACs are losing ground to online search engines. All along, academic librarians have devotedly and assiduously produced good cataloguing records for the public to use. They have diligently and faithfully educated and helped their faculty and students find the proper library resources to fulfill their research needs and assignment requirements. Therefore, it is now imperative for librarians especially the system librarians to create better awareness and effective implementation as well as the usage of the OPAC in the libraries.

2. LITERATURE REVIEW

A library catalogue is an organized set of bibliographic records. It can also be the list of holdings of a particular library or of many libraries connected via computer. It may include books (referred to as monographs), serials, audiovisual materials, computer files, and digital information. The catalogue can exist in several formats, but we will discuss only the card catalogue and the Online Public Access Catalogue (OPAC).

The card catalogue was the most widely used type of catalogue until the early 1990s. Entries were divided into author cards, title/series cards, and subject cards and alphabetically arranged within each category (Sales, 2004). OPAC started in the late 1970s and is now the most widely used format. Bibliographic records are stored in a database and can be quickly retrieved for display on a computer terminal. Studies by Kao (2001) revealed that

OPAC provides wider access, since users can retrieve information from any participating library or even search online from their home computer.

Whatever catalogue format a library chooses, it should be flexible, up to date, and easy to use and maintained. The card catalogue and the OPAC are both flexible. Entries can be added or removed as items are added to or discarded from the collection.

The majority of today's OPACs have successfully fulfilled Cutter's model in finding known items. Following the card-catalogue convention, bibliographic elements such as title, author, and subject have been the leading search options in OPAC search menus for many years. It was assumed that users always come to the library with specific author, title, or subject information in mind before searching the catalogue. The OPAC bibliographic display is in essence an electronic version of the card catalogue. To accommodate the bibliographic data from card catalogues, many display labels were created, but often without regard to whether or not they were suitable in an online environment. This data-centered, card-catalogue type of design was easily understood and fluently used by librarians, but not by most end users. Campbell and Fast found in their study that "while the participants were generally happy with their understanding of search engines, they frequently expressed a low opinion of their ability to search the catalogue." They also found that students felt that the Web is cluttered; the catalogue is organized.

However, this organization was not always helpful; it was admired, but not understood." (Campbell & Fast, 2004). The traditional catalogue retrieval mechanism is significantly different from the Web search engine. As Yu and Young noted in 2004, "Web search engines and online bookstores have a number of features that are not typically incorporated into OPACs. These functions include: natural-language entry, automated mapping to controlled vocabulary, spell-checking, similar pages, relevance-ranked output, popularity tracking, and browsing." These features have unquestionably affected user expectations in searching library OPACs.

An OPAC

- Provides the public with direct access to a library bibliographic database though through the use of terminal
- Is searchable through a variety of access points greater than those available through card form catalogue

- Is searchable with a common command language, which may be transferred when the public moves from one library to another.
- Retrieve information from local library field, and if not successful, locally, retrieves information from other libraries' files.
- Provides instructional help. Display search result in readily understandable form.
- Provides link to card form catalogues, reference help, circulation files, etc. and maybe access remote from the library's location.
- Multiple users can query the database simultaneously unlike the traditional catalogue box where users have to queue when they are searching for similar materials with same search option (Ukpebor, 2011).

The Internet is a large database for information resources, but most of the information in it are disorganized unlike the library collections which have been catalogued and classified. With this borne in mind, it is highly expected that users will find the OPAC useful in searching for information materials that is of interest. However, with the emergence and influx of web resources, the library is expected to revitalize the OPAC so as to make it friendlier for the users. The importance of OPAC in accessing library collection is more than that of web search engines. Consider a user in a typical library. He/she would search for a book using an OPAC terminal, find a book and go to a bookshelf designated by the OPAC. Then, he/she would locate the book on the bookshelf and pick it up to browse it. In some case, he/she would find another book which is more suitable to his/her requirements than the retrieved one. In the case the library user cannot find any book suitable to his/her requirements at the bookshelf, the user would go back to the OPAC terminal or consult with the reference librarian concerning such problems.

The preceding paragraph describes the typical behavior of a user in a conventional library. The OPAC and the librarian are essential aids for the user to access books in the library. From these considerations, the authors found the following aspects to be important to improve the information environment based on existing library information systems;

1. Bridging the gap between OPAC and bookshelves: A user often goes back and forth between an OPAC terminal and bookshelves, so that a tool like a bookshelf browser coupled with an OPAC will be helpful.

2. Improving accessibility to a librarian: It is crucial especially for remote users to have improved communication tools for collaborating with the librarian. This is because, even if OPACs and electronically accessible materials are well-provided, the users need specialized assistance

From these considerations, the following guidelines for OPAC usability improvement were derived.

- Existing databases should be used without modification.
- Graphical (or multimedia) images should be used to help users browse simulated bookshelves as well as physical bookshelves.
- Bookshelves should be (dynamically) re-organizable in accordance with semantically requirements.
- Multiple OPACs including personalized ones should be accessible through a single user interface (or terminal).
- Active information, such as "this book is checked out", should be iconized and given to users as well as bibliographic information.
- User interface of OPAC should be adaptable to the user environment, e.g. terminal type and user preferences.
- User education should be made priority especially in the area of OPAC and its benefits to them

Enhancing Usability of OPAC for University of Benin Library Users

OPAC has been the most common tool for library users and librarians in the 21st century, and it will be also commonly used in digital libraries. It is obvious that well-designed GUI (Graphic User Interface) improves user-friendliness especially for novice users. OPAC with a bookshelf-like browser of bibliographical data would be useful from a practical point of view, even if the bookshelf on a display does not look like a physical bookshelf. The advantages of the bookshelf-like interface are:

- users can find not only a book retrieved via retrieval commands but also from a glance at other books placed on the same bookshelf,
- the structure of bookshelves is semantically organizable, and

- the display order of books is modifiable as needed.

Some new versions of OPAC have a bookshelf-like interface organization based on the Dewey Classification System. Its hierarchical structure helps a user move his/her viewpoint in the space of books and documents. The Book Shelf window of OPAC does not look like a physical bookshelf. In addition to the text-based presentation, the authors consider that images of books and bookshelves would help users find books. The number of book images displayable on a display at a same time is obviously smaller than the number of book title texts. This fact looks disadvantageous, but too much information on a display is not friendly to users. The image-oriented bookshelf has the advantage that users can immediately see the size of a book without reading detailed bibliographic information. In addition, we can embed icons into a book image which represent such information as the book being checked-out, having duplications, one of series books, and so on.

University of Benin students and faculty are accustomed to the usability, flexibility, and performance of the internet best web applications when they logon into the Internet. As a result, traditional catalogue, book catalogues, and OPACs (Online Public Access Catalogues) create frustrating barriers to fast and successful searches, and make it difficult or impossible for visitors to browse for new materials that might capture their interest. In addition, academic libraries are under increasing budgetary pressure and need to make members aware of the full breadth of their offerings. This is exactly why libraries are powering their next generation catalogue systems on web-based OPAC. Computerisation of John Harris library started in 2003 with computers. The library later adopted Strategic Library Automation and Management (SLAM) with seven modules of library operations- Administration, Cataloguing and Classification, Serials, Circulation (Patron management), Acquisition and Online Public Access Catalogue (OPAC). The OPAC module for the SLAM enable users search for the library holdings except journals using Author Search, Title and Subject search. John Harris SLAM for Libraries and OPAC do not enable leading libraries including those in consortia to transform their online catalogue experience. Their visitors can enjoy an interactive experience that is on par with the best online web sites if it is web-based.

Consequently, the users do not have the interest on learning about the OPAC system and making significant use of the SLAM to access the library collections because there are not sufficient search options unlike that of the

Internet search engines which can always give them different search results. The library users want to search the OPAC with many search options with similarity to the Google search engine. However, the situation is made worse when the information resource being searched is not available in the library.

Many libraries, with the goal of modernizing their web presence, are racing to deploy a “next generation catalogue.” Studies by Sierra, Ryan and Wust (2007), showed that next generation catalogue applications typically offer a mix of these features: faceted navigation, keyword searching, relevance-ranked search results, “did you mean?”, style search revisions, item recommendations, RSS feeds, and mechanisms to collect and display user feedback. These “OPAC 2.0” efforts to replace or upgrade legacy OPACs with more powerful alternatives will no doubt improve the overall catalogue experience for many library users. Unfortunately, the gains from these efforts are limited because a single catalogue application cannot be optimized for all library users and uses.

3. CONCLUSION

The information-seeking world has entered an era of self service (Mi & Weng, 2008). The inadequacy of today’s OPAC system is currently being understood as a problem. Inflexible search options make library catalogues difficult to use. Despite the fact that some vendors diligently enhance their systems’ functionalities, overall performance is still disappointing. Markey (2007) pointed out in a recent article that one of the reasons why the solutions recommended by researchers in the 1990s were not applied to online library catalogues was “the failure of ICT vendors in the country to monitor shifts in information-retrieval technology and respond accordingly with system improvements.” Antelman et al. observed similarly that all major vendors are still marketing catalogues that represent second-generation functionality. Despite between-record linking made possible by migrating catalogues to Web interfaces, the underlying indexes and exact-match Boolean search remain unchanged.

Academic libraries should aim toward designing a user-centered, self-sufficient, twenty-first-century online catalogue that fits the Web 2.0 model. The ultimate goal is that users will be comfortable and confident using library OPACs for their information needs wherever a computer is available and without special training.

REFERENCES

- Kristin Antelman, K., Lynema, E & Pace, A.K. (2006). Toward a Twenty-First Century Library Catalog. *Information Technology and Libraries* 25, no. 3: 128–139.
- Apotiade, J. K. (2002). Ibadan distance learning centre series: LSE 302 cataloguing and classification. Ibadan: Distance learning centre University of Ibadan. Pp. 5
- Campbell, D.G. & Fast, K.V. (2004). Panizzi, Lubetzky, and Google: How the Modern Web Environment Is Reinventing the Theory of Cataloguing. *The Canadian Journal of Information and Library Science* 28, no. 3, 25–38.
- Cathy, De Rosa et al., (2007). *Perceptions of Libraries and Information Resources: A Report to the OCLC Membership* (Dublin, Ohio: OCLC, 2005), 1–17. <http://www.oclc.org/reports/2005perceptions.htm> (accessed Jan. 20, 2007).
- Graphical User Interface (GUI) . (2009). Encyclopædia Britannica. *Encyclopædia Britannica 2009 Ultimate Reference Suite*. Chicago: Encyclopædia Britannica.
- Islam, M. (2011). [The use of the library catalogue by undergraduates](#)". *Library Philosophy and Practice*. Available at http://findarticles.com/p/articles/mi_7005/is_2010_Dec/ai_n56765023/
- Kao, M.L. (2001). *Cataloging and Classification for Library Technicians*. New York: The Haworth Press, p. 13.
- Markey, K. (2007). “The Online Library Catalog: Paradise Lost and Paradise Regained?” *D-Lib Magazine* 13, no.1/2 (2007). <http://www.dlib.org/dlib/january07/markey/01markey.htm> (accessed Feb. 11, 2007).
- Mi, J & Cathy, W. (2008). Revitalizing the Library OPAC: Interface, Searching, and Display Challenges. *Information technology and libraries*. Pp. 5-22
- Sales, M.H. (2004). Cataloguing and classification. *JOURNAL OF ADVENTIST EDUCATION*. Pp. 18-29
- Sierra, T., Ryan, J. & Wust, M. (2007). AC 2.0: Library Catalog as Versatile Discovery Platform. *Code4Lib Journal* (1)
- Ukpebor, O.C. (2011). Use of library: transition from traditional to modernity. Ibadan: Avalance Publication. Pp. 44-68
- Yu, H & Young, M. (2004). The Impact of Web Search Engines on Subject Searching in OPAC,” *Information Technology and Libraries* 23, no.4 (2004): 194.