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## Online Public Access Catalogue (Opac): At Brief Discussion

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**Abstract:** The behaviour of academic library user has drastically change in recent years. In the late 1970s and 1980s, the OPAC began to take form. The development of more user – friendly interfaces allowed to search for books and other materials electronically. Internet search engines have become the preferred tool over the library online public access catalogue (OPAC). The paper focuses on a brief discussion about online Public Access Catalogue (OPAC).

**Keywords:** OPAC, OCLC, MARC, Koha.

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### 1. INTRODUCTION

Libraries play a pivotal role in the development of education system worldwide. Library provides suitable materials useful for teaching, learning and research purposes and the supplement classroom teaching work along with provision of knowledge required to attain intellectual pursuit. In order to achieve this goal, most libraries have put in place adequate resources to support teaching and research, trained qualified librarians capable of organizing the information contents in the most scientific and helpful order, the readers who come to use the library and its resources as well as a library catalogue which is used to facilitate easy retrieval of educational resources in the library.

For many years, before the internet search engine emerged, library catalogs were the sole information – seeking gateway. Essentially, library catalogue is one of the important functions of the library which links users' requirements to the documents in a library. Traditionally, manual information retrieval system was used in most libraries to identify and locate available materials by checking card catalogue. Woods (1986) argues that in manual system, all cards had to be drafted, checked, typed, proofread, corrected, sorted, filed and the filling checked. Also, whenever any book is moved to a new location, withdrawn or lost, all the cards had to be found and corrected. However, this system was characterized by various setbacks such as time consuming, subjected to perennial backlogs and errors in card production and filling. Furthermore, as libraries expand and grow, it becomes more difficult to maintain the manual card catalogue due to increasing cost of catalogue maintenance.

With the rapid development of Information and Communication Technology (ICT) in the last two decades and the subsequent development of Online Public Access Catalogue (OPAC), access to library collection is provided in a more convenient and easy way. The term Online Public Access Catalogue (OPAC) refers to information retrieval system composed of database of bibliographic records describing the books and other materials owned by a library or library system, OPAC is accessible online regardless of geographical location making it convenient for remote users or via work stations usually concentrated near the library reference desk to make it easy for a user to request the assistance of a trained reference librarian.

### 1. HISTORY AND EVOLUTION OF OPAC :

The history of OPAC (Online Public Access Catalog) is deeply intertwined with the development of library automation and digital technologies. OPACs are digital catalogs that allow library users to search and locate library resources, such as books, articles, and other materials, using a computer or an online interface. Below is a brief history of OPAC.

- **PRE-OPAC ERA :**

Before OPAC, libraries maintained physical card catalogs (also called card indexes). These were manually created and organized sets of cards, each representing a single item in the library's collection. Library patrons would search these cards by title, author, or subject to find materials. This method was time-consuming and not very user-friendly, especially for large libraries.

- **DEVELOPMENT OF OPAC SYSTEM (1960s – 1980s) :**

**1960s:** The concept of automated catalogs began taking shape. The first attempts at creating computerized catalog systems were made, including the development of the Machine-Readable Cataloging (MARC) format by the Library of Congress in the early 1960s. MARC was designed to standardize the data structure for library catalogs, making it easier for libraries to store and share information electronically.

**1970s:** The first online catalog systems were developed. One of the first systems was the OCLC (Online Computer Library Center), which began in 1967, allowing libraries to share catalog records. OCLC's early systems paved the way for the development of OPACs.

**1980s:** Libraries began installing OPACs, which allowed users to search the library's catalog remotely from terminals. These OPACs were typically connected to local area networks (LANs) within libraries, enabling public access to the catalog.

- **WIDE SPREAD ADOPTION AND FEATURES (1990s – 2000s) :**

**1990s:** With the rise of the internet, libraries began implementing web-based OPACs. This allowed users to access library catalogs remotely from their own computers. These OPACs featured more sophisticated search capabilities, such as Boolean operators, advanced filtering options, and more user-friendly interfaces.

**Late 1990s-2000s:** OPACs started integrating with other library services, such as online renewal, reservation of materials, and account management. The increasing use of the web also meant that more public libraries made their OPAC systems available online, significantly improving access.

During this period, open-source OPAC systems like **Koha** emerged, providing more affordable alternatives for libraries, especially smaller or underfunded ones. Koha, developed in New Zealand in 1999, remains one of the most widely used open-source systems today.

## **2. PURPOSE:**

The main purpose of OPAC is to provide an interface for library users to browse and search the library's collection of materials. It allows users to check item availability, view bibliographic details (e.g., author, title, publisher, etc.), and sometimes even reserve or renew items online.

### 3. KEY FEATURES OF OPAC:

OPACs are designed to provide efficient and user-friendly access to a library's collection. The features typically include:

- **Search Functionality:** OPACs allow users to search for materials using various parameters such as title, author, subject, publisher, ISBN, Keywords and more.
- **Item Availability:** Patrons can check if a particular resource is available checked out, or reserved. They can also view the library's holdings and the number of copies available.
- **Library Account Management:** OPACs systems often allow to log in and manage their accounts, including checking out books, renewing loans, placing holds, and tracking overdue materials.
- **Multimedia and Formats:** OPACs include all kinds of materials, including books, e-books, audiobooks, videos, and other formats. Some systems even incorporate digital media like images and sound clips to enhance the cataloging.
- **Browsing and Filtering:** Users can browse materials by categories such as subject, author, genre, or classification. Filters such as material type or language may also be available to refine search results.
- **Cross-Library Search:** In some cases, OPAC systems allow searching across multiple libraries or library systems, which is especially useful in university or consortium settings.
- **Search History and Recommendations:** Users can view their past searches, and some OPACs even offer personalized recommendations based on search patterns or borrowing history.

### 4. TYPES OF OPAC:

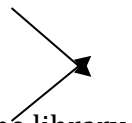
- **Basic OPAC:** A simple cataloging system where users can perform basic searches for materials in the library. It usually includes only essential features like search by title, author, or subject.
- **Advanced OPAC:** An enhanced version of the basic OPAC with additional features like cross-library searches, advanced filters, and integration with other resources (e.g., online databases, external digital libraries).
- **Mobile OPAC:** With the growing use of smartphones, many libraries offer mobile-friendly versions of their OPACs. These may include apps that allow users to search, check out books, renew items, and view their accounts on the go.
- **Web-OPAC:** Most modern OPACs are web-based, allowing access through a browser. This facilitates remote searching which has become an essential service, especially in academic libraries.

### 5. HOW OPAC WORKS:

- **Cataloging Data:** The library's cataloging staff enter information about each resource into the OPAC system. This data often follows standard metadata formats such as MARC (Machine-Readable Cataloging) or Dublin Core, which ensure that resources are indexed and accessible in a uniform manner.
- **Database Queries:** When a user searches for a material, the OPAC queries a database that stores all the metadata. The results are presented in a user-friendly format, typically listing the resource's title, author, availability, and location in the library.
- **User Interface:** The OPAC's user interface is designed to be simple and intuitive, allowing users to quickly and easily find the materials they need.

## 6. THE OPAC RE-EXAMINED:

Cutter, in his 1876 book, introduced the objectives of the library catalog as follows:-

1. To enable a person to find a book of which either
  - a) the author
  - b) the title
  - c) the subject

is known
2. To show what the library has
  - a) by a given author
  - b) on a given subject
  - c) in a given kind of literature
3. To assist in the choice of a book
  - a) as to its edition (bibliographically)
  - b) as to its character (literary or topical)

The majority of today's OPACs have successfully fulfilled Cutter's model in finding known items. Following the card-catalog 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 came to the library with specific author, title, or subject information in mind before searching the catalog. The OPAC bibliographic display is in essence an electronic version of the card catalog. To accommodate the bibliographic data from card catalogs, many display labels were created, but often without regard to whether or not they were suitable in an online environment. This data-centered, card-catalog 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."

The traditional catalog 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. Teaching users to search for structured bibliographic data is completely opposed to the over-popular free and open Internet search mechanism drawn from the Google-like search experience, which does not require any special training.

Since academic libraries aim to provide more dynamic and versatile services, revitalizing library OPACs should be considered a top priority. Furthermore, librarians' expectations of user behaviour should adjust to today's needs. Educating users to become fluent in using OPAC search commands and rules has become less relevant as users now seldom read and follow instructions. Investing effort and energy in designing a truly user-friendly OPAC that functions intuitively to achieve productive retrieval could not be more imperative.

Academic librarians have started pondering what changes should be made to library OPACs so that a truly user-friendly, twenty-first-century catalog that offers a "Google-like"

experience can be delivered. Two important aspects that affect the usability of library OPACs are addressed in this article: (1) the current interface and searching capabilities and (2) the bibliographic display. The OPAC's public interface and searching capabilities together a user is in retrieving information and is the gateway to library resources. The effectiveness of an OPAC's bibliographic display affects the user's understanding of the bibliographic description. Users use bibliographic information to identify, select, and obtain library resources.

## **7. PROS AND CONS OF OPAC:**

OPAC is a system that allows users to search and access information about library resources. It's commonly used by libraries to facilitate the discovery and management of books, journals, media and other materials. Below are the pros and cons of OAC:

### **Pros of OPAC:**

- **Ease of Access :**  
OPAC allows users to access the library's catalog from anywhere with an internet connection, making it convenient for library patrons to search for resources at home, work, or on the go.
- **Real-time Information :**  
OPAC provides up-to-date information on the availability of library materials, including current checkouts, availability in real-time, and whether an items is on hold.
- **Efficient Search Functionally :**  
Advanced search features (such as by title, author, subject, ISBN) help users find relevant materials quickly and accurate.
- **User-Friendly Interface :**  
Most modern OPACs are designed to be user-friendly with simple interfaces, making it easy for users to navigate and find resources, even for those who are not very tech-savvy.
- **Remote Access :**  
Many OPAC systems allow users to access library resources remotely, meaning they can check the availability of materials, place holds, or renew items from anywhere.
- **Catalog Updates and Enhancements :**  
Libraries can easily update and expand their catalogs, adding new books, journals, and digital resources without the need for physical cataloging.
- **Additional Information :**  
OPAC systems often include features such as book summaries, author biographies, reviews, and recommendations, which enhance the user's experience and help in decision-making.
- **Integration with Other Library Systems :**  
OPAC can be integrated with circulation systems, allowing seamless checkout and return processes, and can also connect to other libraries for inter-library loans.
- **Environmental Benefits :**  
Since OPAC reduces the need for paper catalogs and printed search cards, it is an environmentally friendly alternative.

### **Cons and OPAC:**

- **Technical Issues :**  
Like any online system, OPAC is susceptible to technical issues like downtime, server crashes, or slow loading speeds, which can disrupt access.

- **Learning Curve :**  
While many OPACs are user-friendly, there can still be a learning curve for users unfamiliar with library cataloging or those who are not technologically adept.
- **Limited Scope of Search :**  
Depending on the system, OPAC might not provides access to all library resources. For example, some digital, media, journal articles, or archival materials may not be included in the OPAC.
- **Dependence on Internet Access :**  
OPAC is online, so users without internet access or with poor connectivity might struggle to use the system effectively.
- **Data Privacy and Security Concerns :**  
Since OPAC systems collect and store user data (such as borrowing history), there can be concerns about privacy and the security of personal information.
- **Complexity for Special Resources :**  
Some materials, like rare books, special collections, or non-standard formats, may not be well represented or easily searchable in the OPAC system.
- **Over-reliance on Technology :**  
Libraries that rely too heavily on OPAC might limit access for individuals who prefer traditional paper catalogs or who don't have the skills or resources to use technology.
- **Limited Customer Support :**  
While OPAC systems are generally intuitive, some users may still require assistance. Insufficient customer support or guidance can be frustrating, especially in cases of technical difficulties or complex queries.
- **Inadequate Search Results :**  
If the metadata (like keywords, titles, or subject tags) is poorly entered or inaccurate, OPAC searches might yield incomplete or irrelevant results.

## **8. FUTURE TRENDS IN OPAC:**

- **Integration with Artificial Intelligence (AI):** Some OPAC systems are starting to incorporate AI to improve search accuracy, provide better recommendations, or even predict user needs based on historical data.
- **Enhanced User Interaction:** Newer OPACs may include voice search, chatbots, or augmented reality (AR) to further improve the user experience.
- **Cloud-Based OPACs :** With the increasing shift towards cloud computing, many OPAC systems are being hosted on the cloud, allowing for better scalability, easier updates, and better access control.
- **Unified Systems:** Libraries are moving toward more integrated systems where OPACs are just one part of a broader suite of tools, including digital archives, e-learning platforms, and even automated circulation systems.

## **CONCLUSION**

An OPAC is a vital tool for modern libraries, providing users with easy access to the library's catalog and improving their overall library experience. It has evolved overtime, incorporating more sophisticated features to meet the needs of the digital age.

OPAC systems significantly enhance the accessibility and efficiency of library catalogs, but their effectiveness depend on the technology, user training, and maintenance. Libraries should weigh the benefits against the potential drawbacks to optimize their OPAC systems.

The success of OPAC implementation in the library depends greatly on the extent to which users are kept well informed and OPAC and be trained to equip them with requisite skills, so that they can understand, accept and make more effective use of OPAC services. Therefore, optimum utilization of OPAC can be achieved by well-designed training programme, effective marketing strategy and improved accessibility to internet connected computers (Ramana, 2004; Kinengyere).

The adoption of OPAC in the library is of particular ideal for distance learners as they need not to spend time to travel from their location to the library to know the availability of a particular book, to place book requests or to spend time scanning through the library card catalogue to know the call number of a particular book. With OPAC, distance learner can now browse online the physical collection of the library anywhere regardless of their geographical location and thus this initiative has saved their time and cost of travelling from their remote locations and number of physical presence in the library. Fati and Adetimirin (2015) argues that OPAC minimizes the time and stress of searching through shelves thereby supporting the fourth of the Ranganathan's law of Library Science "Save the time of the user".

As Campbell and Fast have trenchantly asked, "Are we witnessing a major disruption, a large-scale redefinition of information design and delivery so radically different from the traditional library environment that it renders irrelevant all our experience in bibliographic control?" This remains an open questions. Regardless, a new generation of OPACs will need to be in place soon. Much needs to be done to make academic library OPACs matter. Academic librarians cannot afford to be considered irrelevant in the information-seeking world. The future of academic libraries relies on effective OPACs. This is one of the most pressing tasks that must be accomplished.

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