

THE ROLE OF THE LIBRARY OF CONGRESS AND OCLC IN THE STRATEGIC DEVELOPMENT OF INFORMATION AND LIBRARY INSTITUTIONS**Lyudmila Muminhodzhaeva**Senior Lecturer, Department of Library and Information Activities,
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Annotation: The article examines the role of the Library of Congress and the Online Computer Library Center (OCLC) in the strategic development of information and library institutions. Special attention is paid to the contribution of these institutions to the formation of global standards for bibliographic description, the development of network interaction between libraries, and the creation of a unified information space. The article analyzes the key areas of activity of the Library of Congress and OCLC, including the development of international catalogs, support for digital innovation, metadata management, and access to global information resources. The importance of their cooperation is noted in terms of improving the efficiency of library and information services, integrating libraries into the global community, and strengthening the strategic potential of the library system as a whole.

Keywords: U.S. Library of Congress, OCLC, WorldCat, information and library institutions, strategic development, international cooperation, cataloging standards, and digitalization.

The Library of Congress is the oldest federal cultural institution in the country, serving as the research arm of Congress. In addition, it is the largest library in the world, with collections containing millions of books, audio and video recordings, photographs, maps, and manuscripts. The mission of this library is to assist Congress in fulfilling its constitutional duties and to promote knowledge and creativity for the benefit of the American people.

The Library of Congress has the most extensive electronic catalog among libraries worldwide, providing access to information on more than 12 million items. The catalog, operating on the Voyager software developed by Endeavor Information Systems, contains information on books, periodicals, continuing publications, maps, manuscripts, and audio recordings. Of the total, 3.2 million records belong to the "old catalog," referring to books and periodicals received by the library between 1898 and 1980 and converted from the card catalog. The Library of Congress collections include a large number of Russian-language materials described in transliteration. The main catalog menu offers two search options: Basic Search and Guided Search.

The most effective tool is Guided Search, which allows users to easily create search queries of any complexity through a two-line menu with additional restrictions (Search Limits). In addition to entering keywords that accurately express the information need, it is crucial to correctly apply the parameters set through the drop-down menus, as they ensure the proper interpretation of the entered terms.

The list of results is displayed as a table containing brief descriptions. A mouse click on a specific record opens a more detailed version (Brief record). To obtain complete information about a document, one must click on Full record. This function reveals subject headings, which is particularly valuable for heuristic searches when the area of knowledge is not precisely defined [6].

The system allows users to create a list from the general set of results. Records can be saved in various ways, including sending selected descriptions by email to any address. There is also a publication request function; however, it is currently available only to members of Congress and library staff.

<http://catalog.loc.gov/>

OCLC Online Computer Library Center, Inc. (OCLC) is a non-profit, membership-based computer library service and research organization whose public purpose is to increase access to the world's information and reduce information costs. It was founded on July 6, 1967, as the non-profit Ohio College Library Center. Today, more than 74,000 libraries in 170 countries and territories use OCLC services for searching, acquiring, cataloging, lending, and preserving library materials. OCLC provides access to bibliographic, annotated, and full-text information [5].

The main services include library management, cataloging, electronic libraries, virtual reference information, and resource sharing. OCLC Research focuses on data collection and support for research, understanding the system-wide library environment, data science, and user studies.

OCLC has a database for cataloging and searching that is used by librarians and the general public. The current software, Connexion, was launched in 2001. The database contains records in the Machine-Readable Cataloging (MARC) format, which is used worldwide by library catalogers who rely on OCLC as a cataloging tool. Records created in MARC format are then uploaded into local library catalog systems. This enables libraries to find and download information about materials and add them to their local catalogs without the lengthy process of cataloging each item individually.

“You decide what you want to make available to readers around the world and set your own rules for the use of your documents,” said OCLC Managing Director Erik van Lubeek. “Our system offers unique opportunities to promote your collections globally. For example, the National Library of Denmark uploaded its data to us three years ago and, as a result, received a huge number of interlibrary loan requests.” According to Mr. van Lubeek, OCLC is particularly interested in the collections of national libraries.

OCLC not only connects libraries around the world but, most importantly, shortens the path between readers and books. WorldCat is the world's most comprehensive bibliographic database and global library catalog, containing over 500 million bibliographic records representing materials held in libraries across the globe. This vast cooperative database reflects the collective collections of more than 17,000 libraries in over 100 countries, making it an unprecedented resource for both library professionals and end users seeking information about published materials [1].

The WorldCat digital gateway removes barriers between the broadest search engine, Google, and library catalogs that are not directly indexed there: thanks to an agreement between OCLC and Google, any record uploaded to the catalog appears in Google search results with a link to the list of libraries where the book can be found. “In this way, we direct readers back from the internet to libraries,” noted Erik van Lubeek. Within the OCLC system, readers can create and store their own book lists and access the system from any mobile device. Every day, OCLC systems process more than 40 million search queries [2].

In recent years, OCLC has conducted several informational seminars in Central Europe and Asia to study the urgent needs and interests of libraries — OCLC representatives have visited Azerbaijan, Georgia, Kyrgyzstan, and the Baltic countries. Today, information seekers require more resources and faster access across all channels. To meet user needs while managing costs, libraries need reliable access to advanced technologies. As a leader in data processing technology and an innovator in cloud-based library services, OCLC is uniquely positioned to partner with member libraries in this complex technological environment.

As a library cooperative, OCLC remains closely attuned to the needs of its users, improving its operations by developing and refining library technologies. More than 450 IT specialists work at OCLC, engaged in various programming environments, system operations, and product portfolios. The organization employs staff with over 30 years of experience in technology, alongside new professionals who are striving for excellence.

OCLC operates data and engineering centers in Australia, Canada, the Netherlands, and the United States. A total of 15,637 member libraries in 107 countries use OCLC services to save

time and money and to provide their users with better access to the information they need. The shared cloud infrastructure enables fast, distributed processing of numerous applications and large datasets across server clusters. Developers use the latest technologies to build large-scale, high-availability web applications. Hadoop/HBase is used to manage a collection of databases related to libraries. Web applications and APIs are hosted in global data centers using an extensive service-oriented architecture.

Many OCLC applications are based on WorldCat data, the world's largest bibliographic database. Containing information on more than 3 billion library items, WorldCat is a unique resource for both libraries and developers, offering opportunities to develop big data applications that are integral to library operations.

OCLC's approach to technology leads to new levels of efficiency in library workflows. Since libraries use OCLC services for such a wide range of solutions, application developers manage a truly diverse portfolio of software products. WorldShare Management Services, a cloud-based library management suite, is used by more than 600 institutions to support many back-office library operations. OCLC also provides WorldCat Discovery, a user-oriented library search environment, along with many other services for libraries and users. Collaboration with libraries creates opportunities for new and significant research, educational initiatives, and achievements that few other organizations can offer [1].

OCLC continuously monitors and improves its applications, systems, and processes to meet growing challenges and security threats. Confidentiality, integrity, and information availability are of paramount importance, as they protect the security and privacy of libraries and their users. Members of OCLC's global security services team hold various industry-recognized professional certifications, such as Certified Information Systems Security Professional (CISSP) from ISC2, Certified Information Security Auditor (ISACA), Certified Privacy Professional (IAPP), and others.

OCLC maintains an information security program certified under the international standard ISO/IEC 27001. Other frameworks, such as the National Institute of Standards and Technology (NIST) guidelines for security and privacy controls for federal information systems, the directives of the European Union Agency for Cybersecurity (ENISA), and the Cloud Security Alliance Cloud Controls Matrix, enable OCLC to address issues related to both security and privacy.

OCLC classifies information to determine what requires strong protection and what does not. This means that publicly available information can be widely accessible, while personal data receive much greater protection. To safeguard critical information, a multilayered approach is used, combining preventive and detective controls at various levels of data access, storage, and transmission. Their information security program is based on ISO/IEC 27001:2013.

OCLC's commitment to securing library services includes risk management; control of physical, environmental, and logical access; operational security; maintenance; business continuity and disaster recovery; as well as incident response, notification, and troubleshooting.

OCLC strives to stay ahead of emerging technologies that advance libraries. In 2011, OCLC launched the first cloud-based library management platform. Since then, more OCLC services have migrated to this platform. The cloud architecture has enabled greater integration and reuse of library data, allowing tasks to be performed on any Internet-connected device, including mobile phones and tablets.

OCLC is a pioneer in the development and implementation of library-linked data technology. Its efforts make library information available in formats that are natural for the Internet, improving discoverability on popular websites and services. Today, any library's search system and software can be connected to OCLC, with libraries independently uploading their own data into the system. In 2012 alone, more than 9,300 content collections from over 5,300 providers were uploaded [6].

OCLC developers also collaborate with library technologists around the world on new ways to use OCLC data and services. The API and Web Services Gallery features examples of projects that incorporate OCLC-developed APIs across a wide range of environments and solutions. OCLC sponsors various live “hybrid” events that bring together developers from around the globe to work and learn through dynamic hands-on sessions.

The technology teams also work closely with OCLC Research, one of the world’s leading centers dedicated exclusively to addressing the challenges faced by libraries and archives. The insights and data from this research lead to actionable outcomes and are reflected in new technologies and services, such as the Collection Evaluation tool and collaborative print management initiatives.

OCLC offers its partners numerous opportunities to connect with libraries and use library data to enhance their products and improve library services. Publishers and aggregators provide metadata about their content through OCLC databases and applications. Some service providers collaborate to integrate data in ways that offer a broader range of options and simplify workflows for libraries. Search engines, consumer web services, and learning management systems make OCLC data accessible to users, directing them back to libraries and their resources. These are just a few examples of how OCLC’s partnerships benefit libraries and their patrons.

OCLC conducts research that helps institutions stay ahead of pressing challenges and ensures that the emergence of new technologies transforms the lives of librarians, researchers, and other library users. OCLC provides shared services that help libraries operate more efficiently, allowing them to devote more time and resources to their missions, and offers tools and data that member libraries need to fulfill their commitments to the communities they serve.

OCLC has a long history of creating, testing, and scaling programs that advance libraries and librarianship. Some examples include the public awareness campaign “BiblioFreak” for computer libraries in Switzerland; the community support initiative “Outside the Box” based on local events; and WebJunction, an online learning center for librarians.

OCLC libraries collectively hold an enormous amount of knowledge. By working together, they make this information more visible and accessible to end users through shared WorldCat data, syndication programs, and partnerships. This exchange of ideas builds connections both within and beyond the library community. It brings together thinkers and practitioners around common goals and helps all stakeholders—especially researchers—achieve their objectives by providing access to global knowledge.

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