An Expedition into the Future of Discovery and Cataloging

Transforming the Library Experience with Linked Open Data and AI

Linked Open Data is a foundational component in the future of library software solutions, ushering in an era of connectivity and knowledge exploration that will change the way we interact with content, from cataloging to discovery. With Linked Open Data creating connections and relationships that were previously unavailable, our users' search and discovery experience is enriched, more reliable and can both deepen their research and expand their horizons.

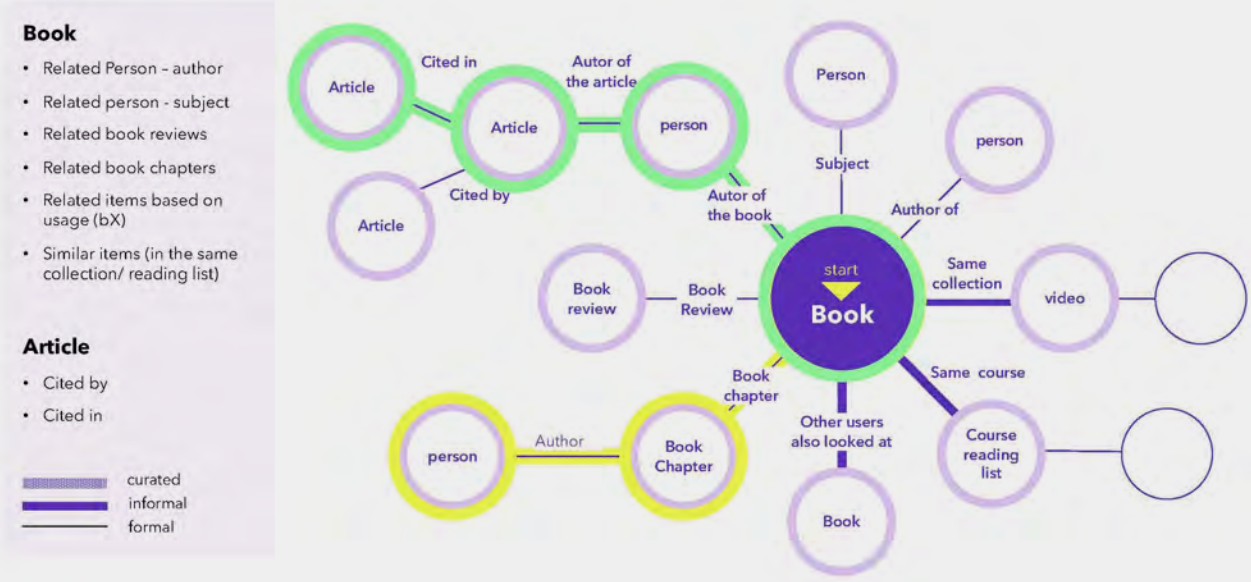
Traditionally, libraries support known connections between entities such as books and their chapters, or articles and their authors. With Linked Open Data, we can create new, unexpected and extended relationships between entities.

For example, a book's author can now be connected to their birthplace, which in turn connects them to another author who may have lived in that city at the same time, perhaps hinting at possible mutual influences from their joint location; this can expand the user's context.

Alternatively, a book's subject may be a unique field of interest, which can lead a user down a path to deepen their understanding of this field based, for example, on connections made by other researchers.

At Ex Libris, a part of Clarivate, we are actively working with our trusted community to develop innovative, real-life applications for Linked Open Data that will benefit end-users as well as impact how libraries catalog and manage their content. From collaborative cataloging to enabling access to library resources from external sites, Linked Open Data is our path towards the future of connectivity.

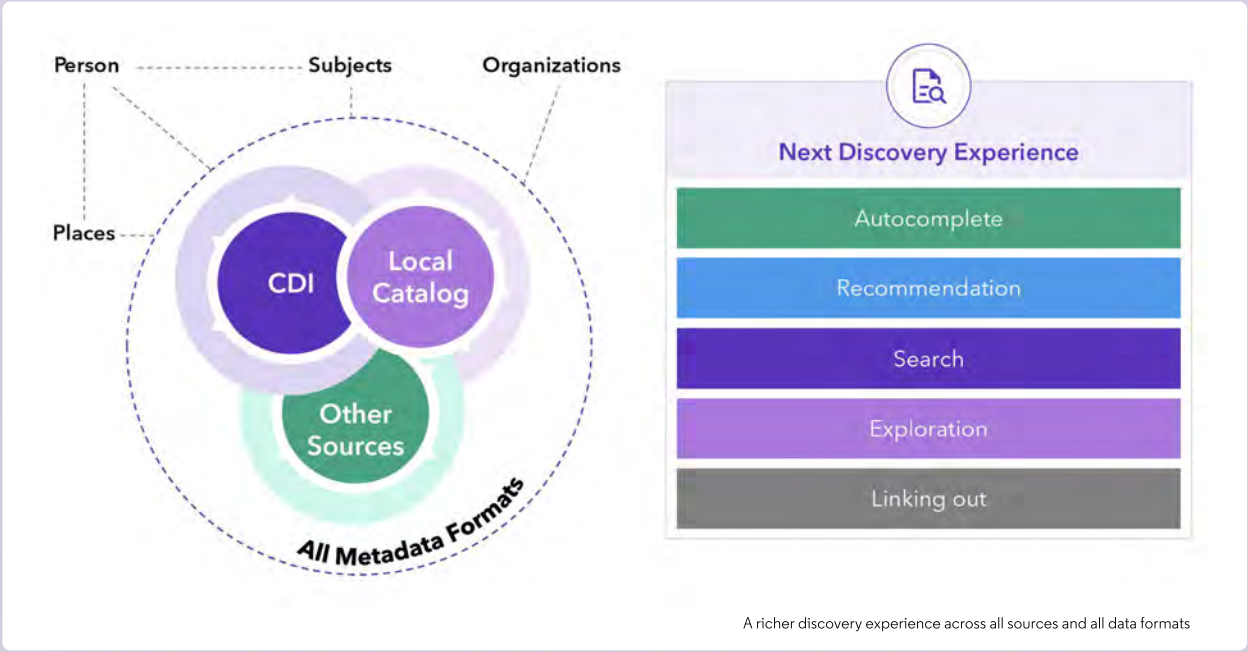
We're sharing our vision for a future where metadata is perpetually enhanced and updated through advanced technology, best practice methods and intricate interconnectivity with other libraries and sites around the world, so all can contribute to and benefit from the collective effort.



Linked Open Data supports new connections and relationships

Our Linked Open Data developments focus on three pillars:

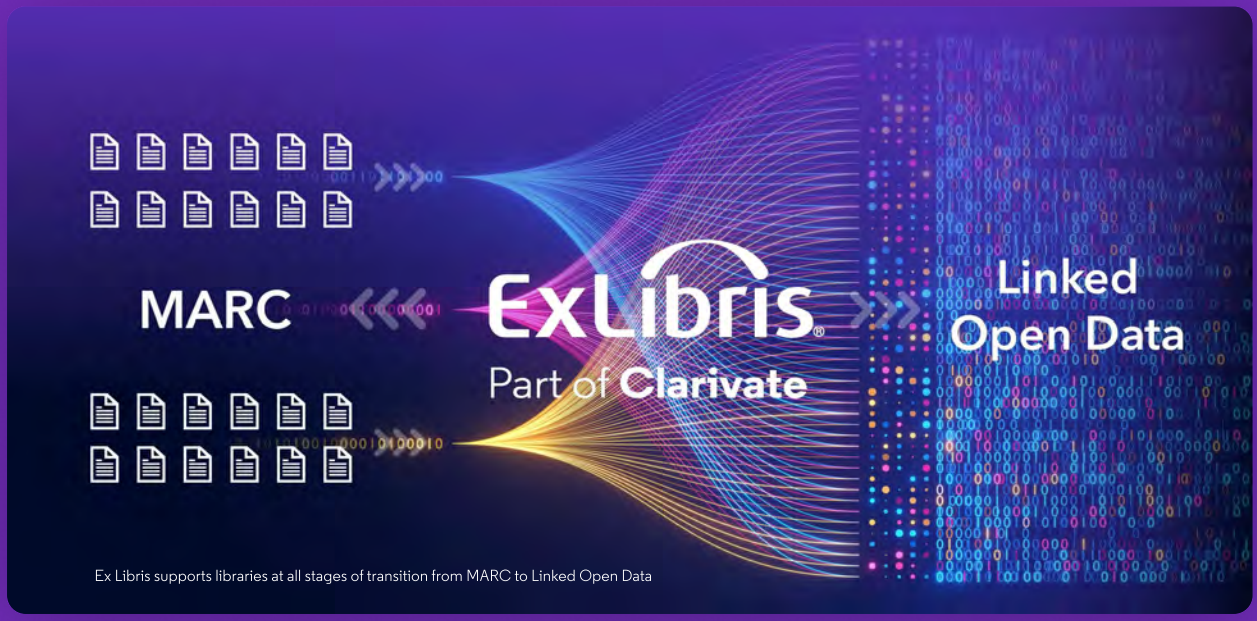
1 → Better Discoverability



A richer discovery experience across all sources and all data formats

Enhanced with Linked Open Data, your local library catalog, regardless of your record format, could be connected with Ex Libris Central Discovery Index (CDI) records and enhanced with information from additional sources such as the Web of Science™ and Wikidata. This enables related topics to be effortlessly surfaced, resulting in more robust discovery and exciting new research pathways.

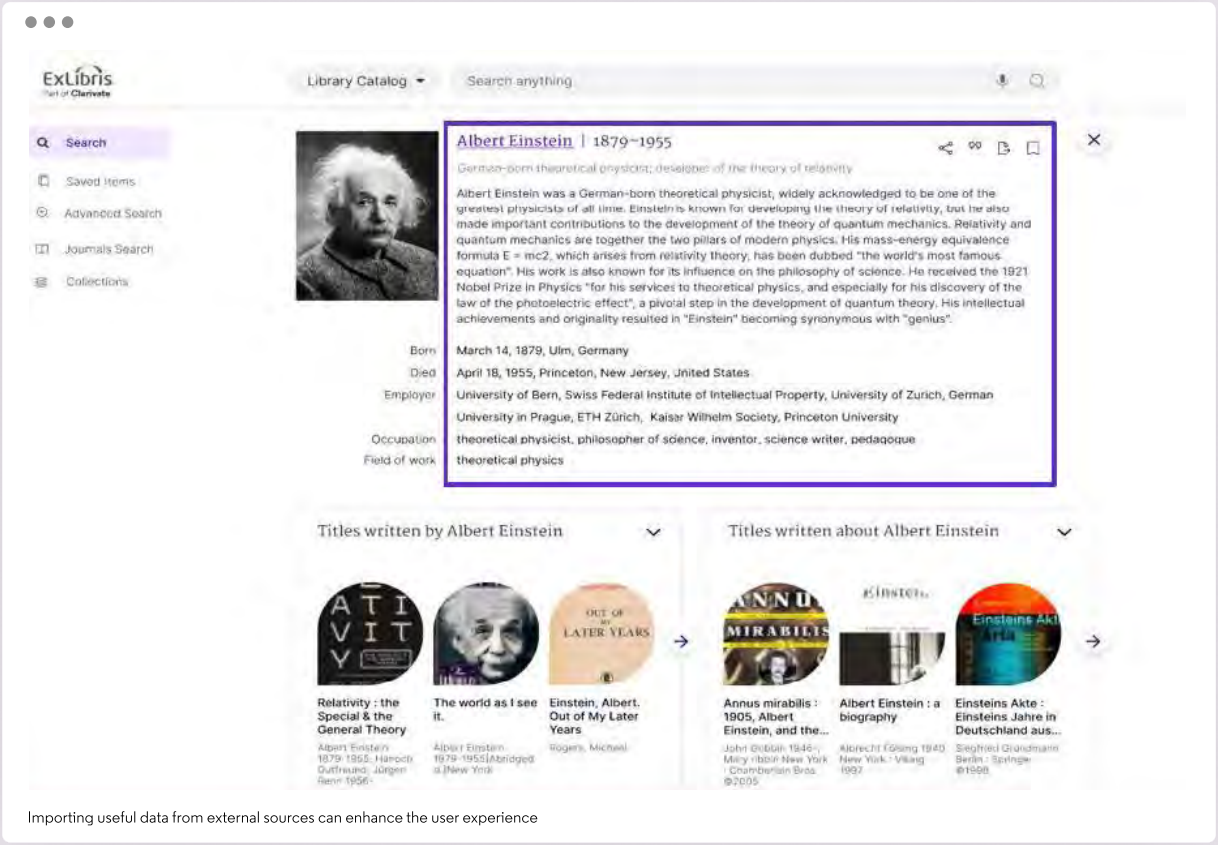
2 → Collaborative Cataloging



Ex Libris supports libraries at all stages of transition from MARC to Linked Open Data

We are actively working with the Library community, several of whom are members of our Linked Open Data focus group, on a collaborative cataloging platform where libraries work together to create a central source for robust and highly accurate metadata that is shared across the network of other contributing libraries.

3 → Global Interoperability



Importing useful data from external sources can enhance the user experience

Through integration with global information sources, such as ORCID and Wikidata, we envision a future where libraries are connected via an ecosystem where information flows both ways – in and out of systems. This would enable the import, for example, of a full "person page" built using information from Wikidata and presented to the user as a known source for this information, encouraging the user to remain on the library platform, where they are receiving a fuller experience and expanding their knowledge. There are many more such use cases, where users and libraries can benefit from interoperability with external sites, and we are continuously exploring ways to expand these capabilities.

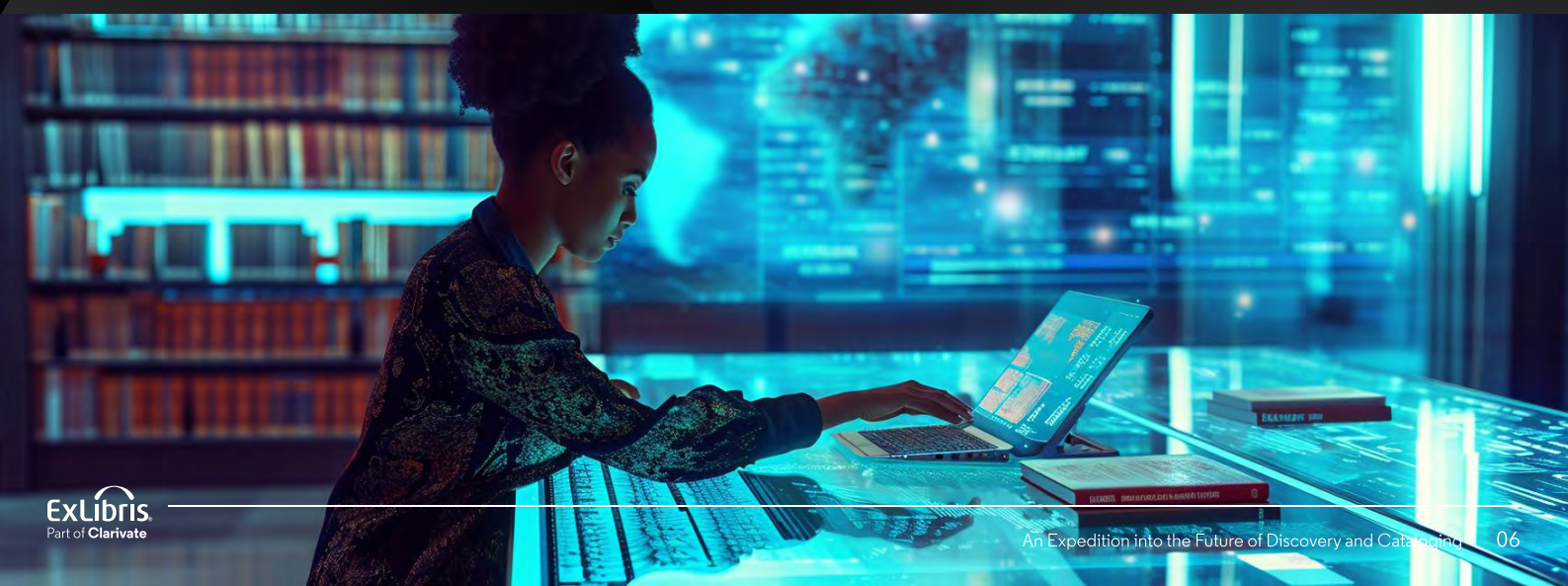
Enhancing Linked Open Data with AI

Our AI model is based on trusted, curated library resources and data generating reliable results.

Our innovation in Linked Open Data incorporates artificial intelligence (AI) technologies in practical ways, supporting the automation of manual and mundane tasks that can free up librarians' and catalogers' time to focus on their areas of expertise and other interesting work. As Linked Open Data is a semantic web based on BIBFRAME metadata records and other metadata formats, using AI technology that can more easily generate these records has long-term time-saving benefits alongside the exponential potential for quality improvements over time. AI can perform these tasks on a large scale to generate and ingest these data more quickly and accurately into our global network of metadata.

Our AI model is based on trusted, curated library resources and data, generating reliable results, and can help find hidden relationships between people, places and objects contained in your catalog. This will support users in surfacing and exploring surprising or little-known connections and nuances in their research areas, opening the way for exciting – and potentially world-changing – new insights, knowledge and understanding.

At Ex Libris, the use of AI technology is always done to solve the real challenges of real users, librarians, and libraries. We respect the need for privacy and intellectual property considerations, and above all, we understand the importance of using trusted scholarly content to generate reliable results and information.



Why Linked OPEN Data?

We put a special emphasis on “open” because at Ex Libris, openness means community, and Linked Open Data is all about strengthening the connections between and with our community. Collaborative cataloging centers on a community of contributors, which expands the network of information to benefit student and researcher communities.

Collaborative cataloging enables librarians and catalogers to focus their valuable time on their other areas of expertise and important strategic work, and less on mundane tasks.

This collective effort creates a richer, more accessible body of knowledge and information for all. Together, we are heading on an expedition to redefine what library discovery and cataloging can be.

Linked Open Data also serves the global community by enriching search results with external sources and opening up the wealth of library content to the world.

Want to learn more about Linked Open Data at Ex Libris? Check out our new Linked Open Data webpage!

→ **Visit our Linked Open Data webpage**