



Linked Open Data Library Ecosystem Powered by AI

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Agenda



What is Linked Open Data for libraries?



Metadata flow in a future ecosystem



Ex Libris roadmap

- What already exists
 - What is planned
-



Focus group for Production



Primo and Discovery

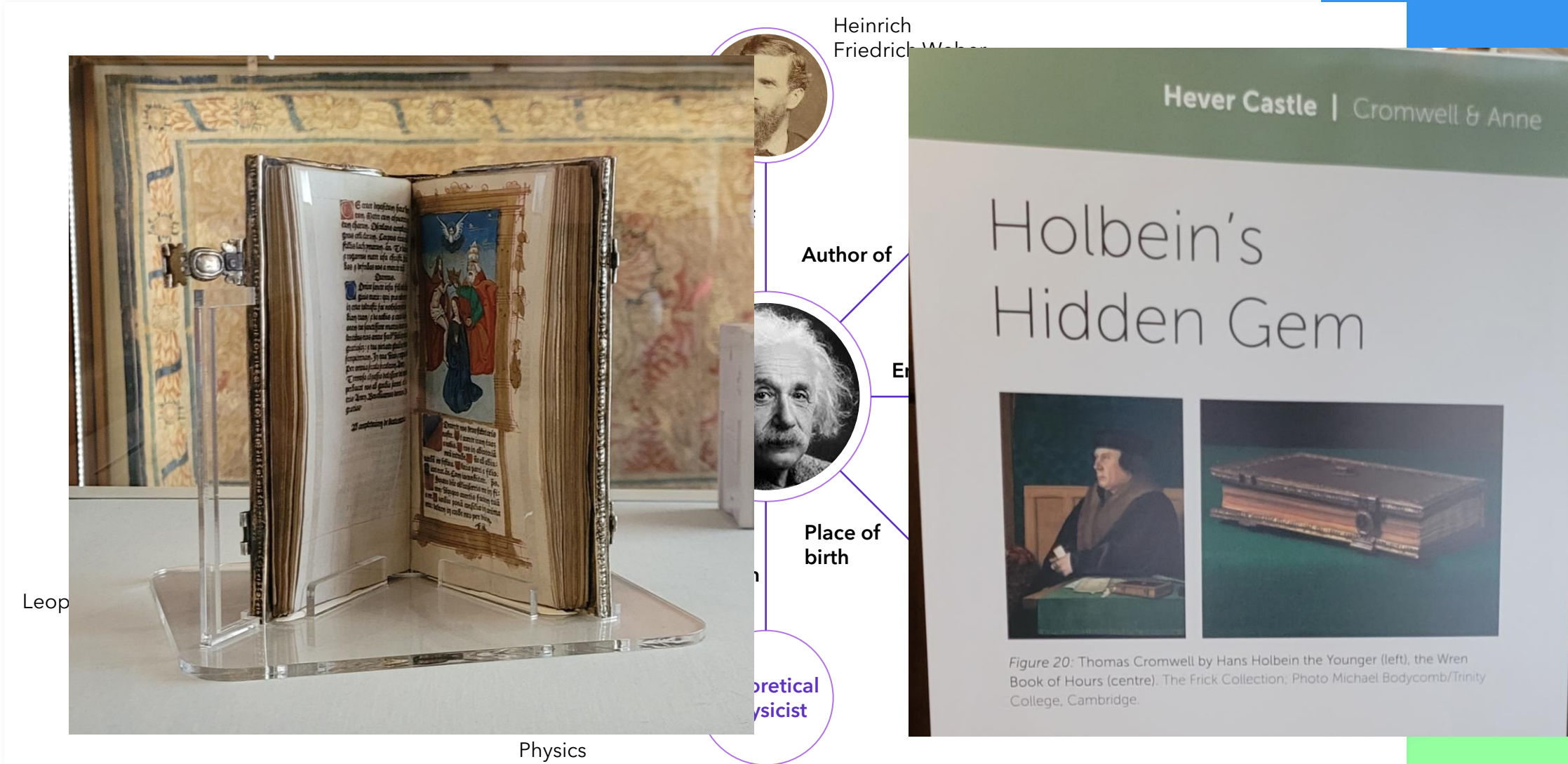


The future of Linked Data and AI together

We want a global metadata ecosystem that enables users to find what they need and access it in the best way

The library vision

Connecting Entities for a Richer Discovery Experience



What Are the Benefits of Linked Open Data?



**Efficient
Cataloging**

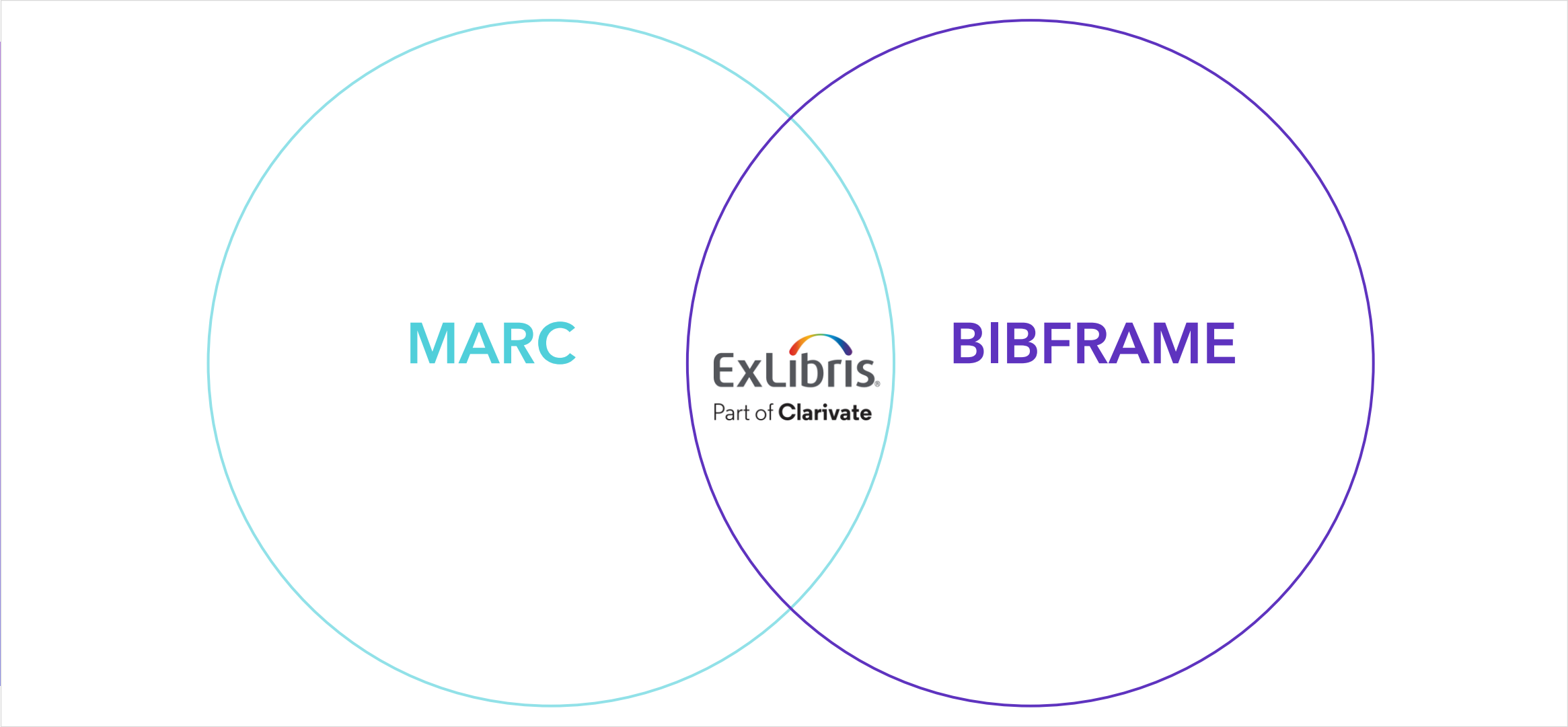


**Better
Discoverability**



**Global
Interoperability**

MARC and Linked Open Data



What Already Exists

Ecosystem

APIs and endpoints

Publish and export to
BIBFRAME



Management

URI
enrichment

Alma Refine

Alma

Discovery

Record enrichment

Recommendations

Search Engine Optimization

Primo

Alma Refine - MARC Enrichment

Allows enrichment of MARC records with
Linked Data URIs from various sources

WikiData

Getty

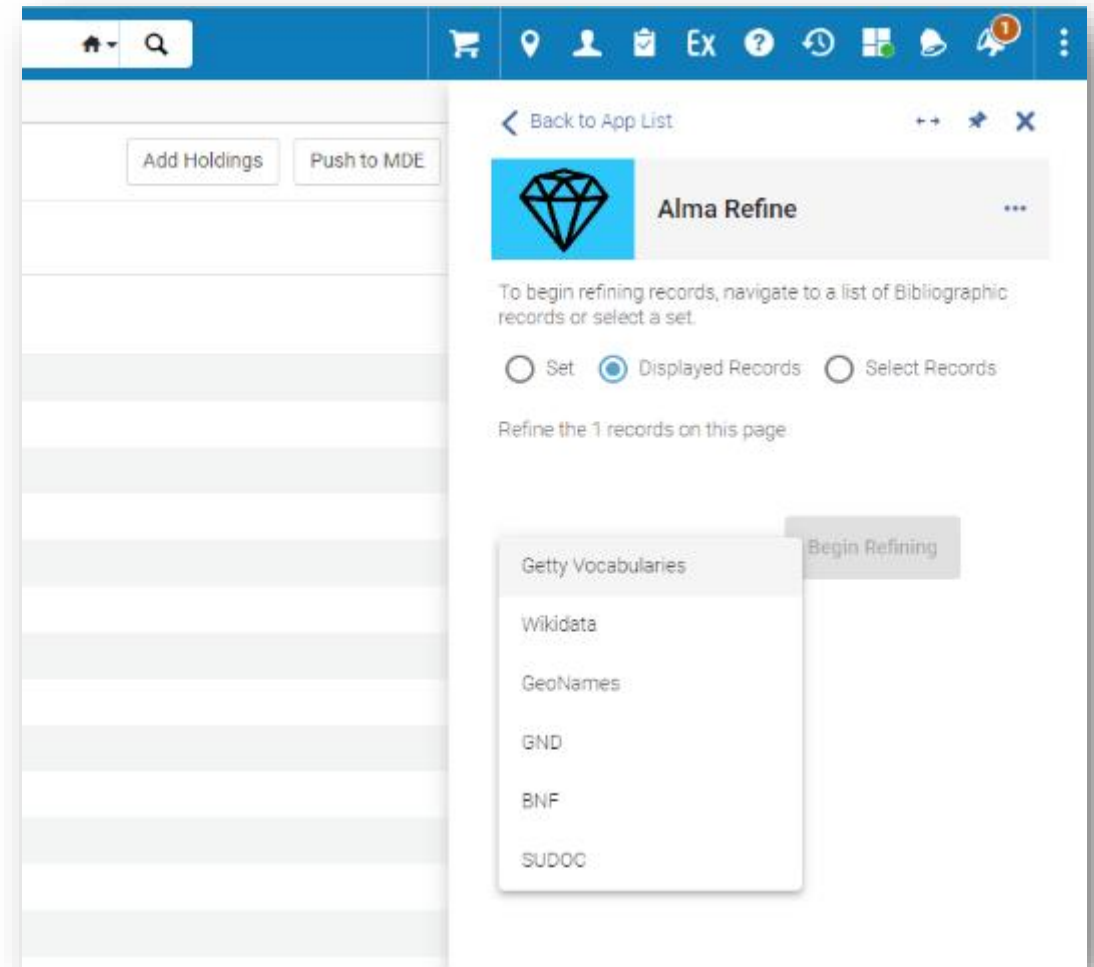
GND

BNF

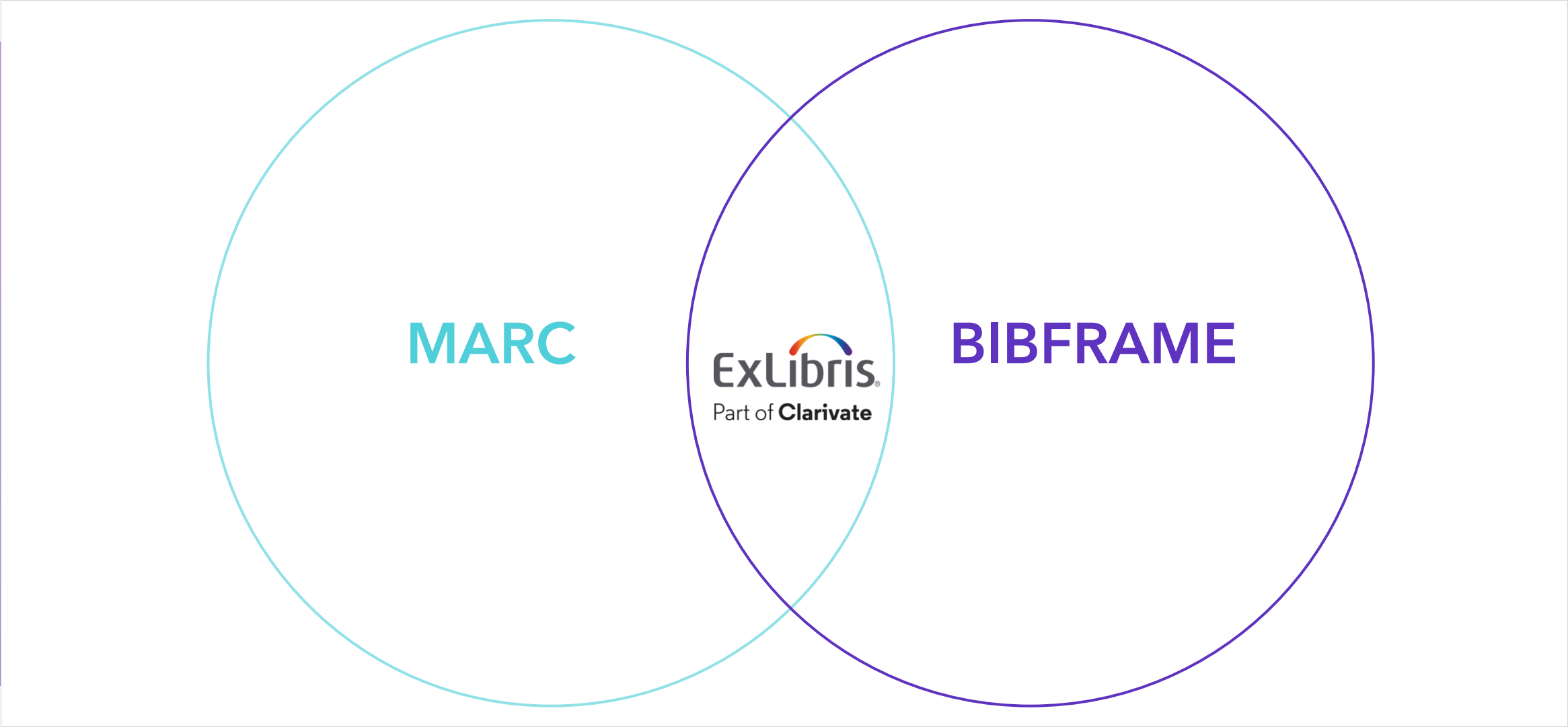
SUDOC

GeoNames

ORCID was added to vocabularies
in August 2023 release



Moving to Full Support of Linked Open Data



Ex Libris Linked Open Data Focus Group



Princeton

Harvard

Working with the community, for the community

What We Want to Achieve with Our Community

Management



- Infrastructure for global connectivity
- Curated richness and efficient cataloging
- Shift focus to unique materials

Discovery



- Improved Discovery experience
- Simpler and quicker research discovery flows
- Easy navigation to related information

Focus Group Goal 2024: End-to-End Workflow



What it Will Look Like - from Sinopia, via Alma to Primo

The screenshot displays the Sinopia interface for a monograph instance. The top navigation bar includes 'Dashboard', 'Editor', 'Resource Templates', 'Actions', and a search bar with 'Sinopia' and 'harry potter' entered. A prominent 'Export to Catalog' button is visible. The main content area is titled '_ Monograph Instance (BIBFRAME) INSTANCE' and shows the instance's URI and a 'Go to Lib' button. A left sidebar contains navigation options like 'Title Information', 'Statement of Responsibility', and 'Edition Statement'. The central pane shows 'Title Information' with the instance title 'Harry Potter and the Chamber of Secrets' and a 'Main Title' field. Below this, the 'Record' tab displays the BIBFRAME metadata in XML format, including fields for publication date, place, agent, and date. On the right, there is a 'Related Persons' section for J.K. Rowling, listing her birth date, place of birth, and field of work. A 'Virtual Browser' section at the bottom right shows the item's availability and location details.

Demo by Jim Hahn,
Head of Metadata Research at the University of Pennsylvania Libraries



Sinopia RDF to Alma

Jim Hahn

jimhahn@upenn.edu



Penn
Libraries

Looking to the Future: Linked Open Data Entities

Opportunities

Connect to data pool

Integrating with open large databases directly

Accurate linking

Using URI/IRI (Resource Identifier) base linking to an entity

Diverse information

Displaying diverse information from multiple systems to the users

Challenges

Distributed data

Data is distributed between multiple systems

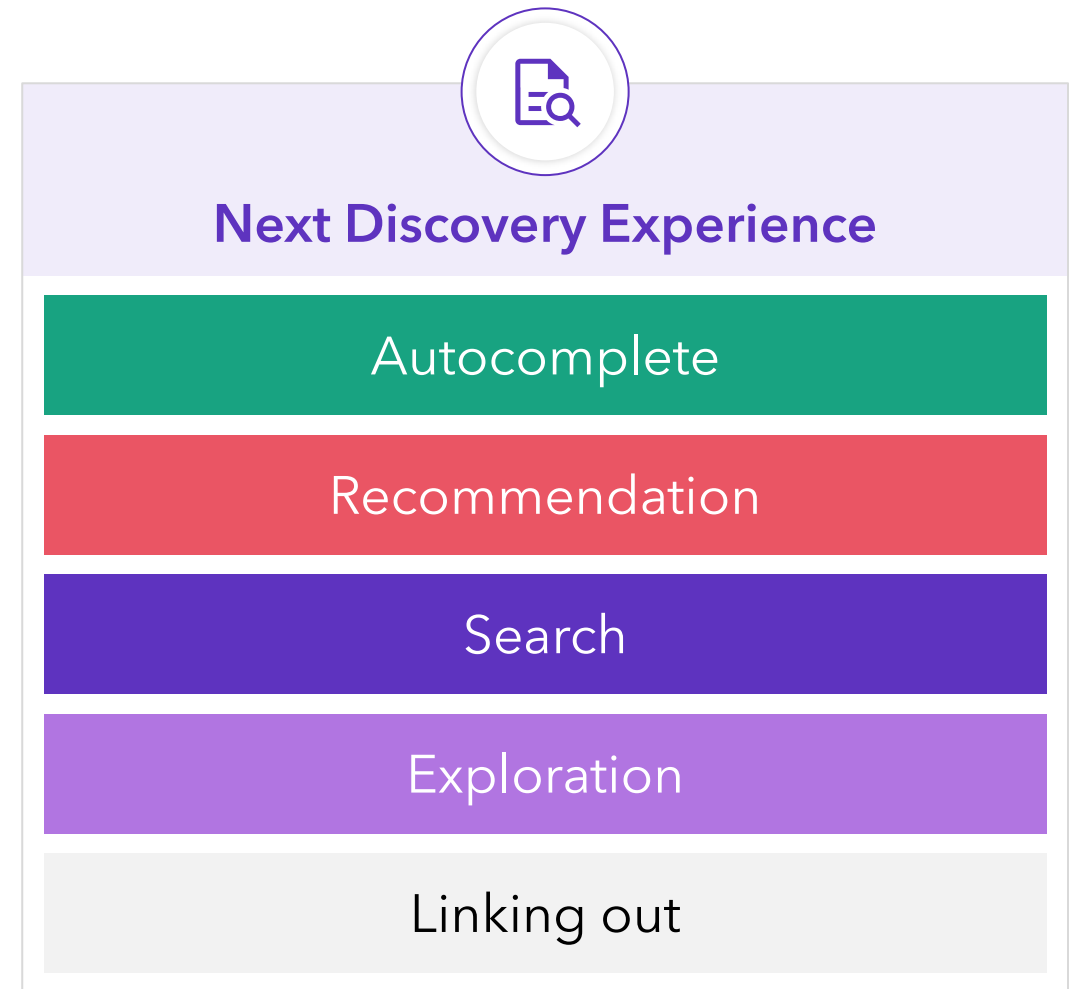
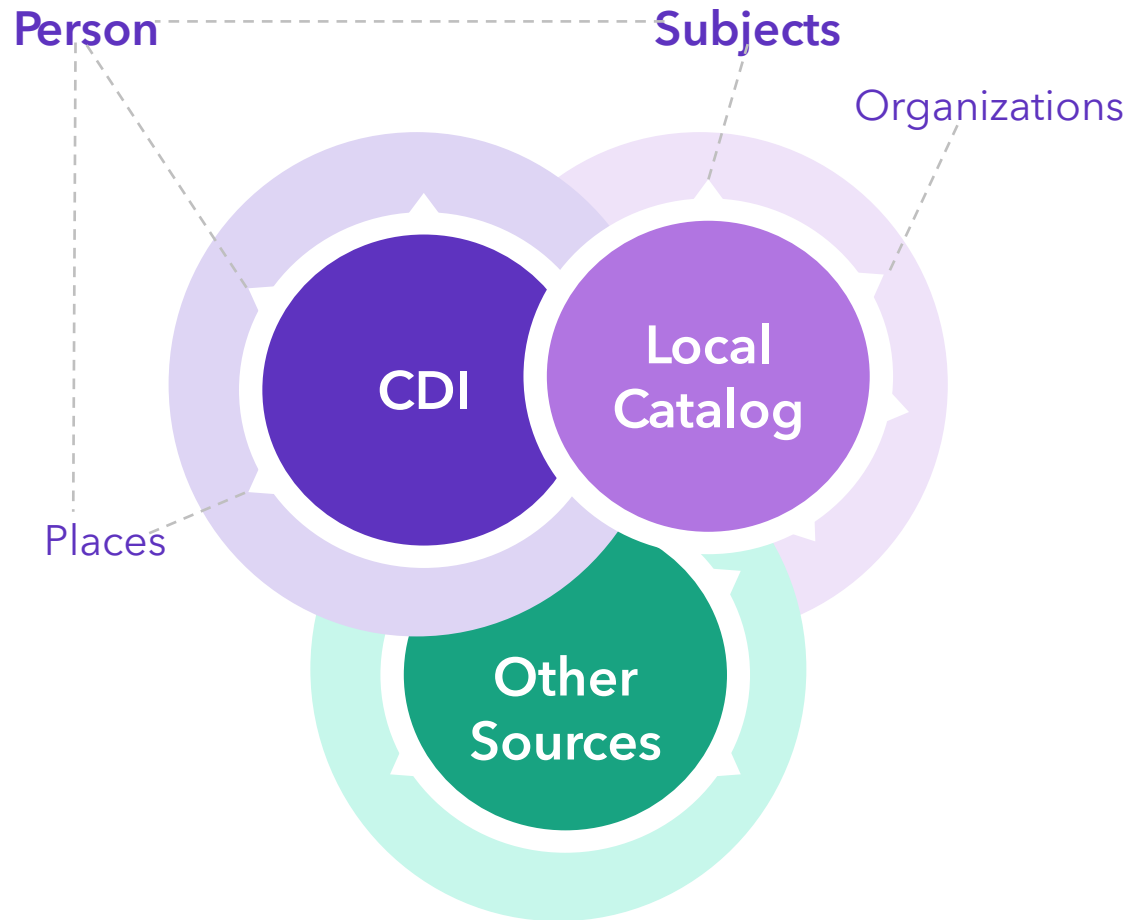
Human readability

A record may not even contain any human-readable creator/subject information, just URIs

Remote data

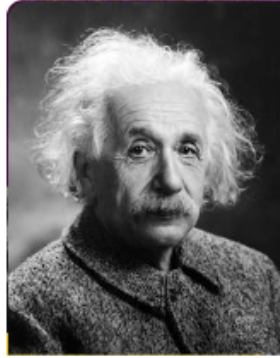
How can remote information be used efficiently in searching and cataloging

New Linked Data Network - Connect the dots for a richer discovery experience



Providing a Linked Data experience to all libraries, regardless of the record format

How will the Next Discovery Experience leverage a person entity to reach its triplets?



Albert Einstein, 1879–1955

Person Information



German-born theoretical physicist; developer of the theory of relativity

Albert Einstein was a German-born theoretical physicist, widely acknowledged to be one of the greatest physicists of all time. Einstein is known for developing the theory of relativity, but he also made important contributions to the development of the theory of quantum mechanics. Relativity and quantum mechanics are together the two pillars of modern physics. His mass–energy equivalence formula $E = mc^2$, which arises from relativity theory, has been dubbed "the world's most famous equation". His work is also known for its influence on the philosophy of science. He received the 1921 Nobel Prize in Physics "for his services to theoretical physics, and especially for his discovery of the law of the photoelectric effect", a pivotal step in the development of quantum theory. His intellectual achievements and originality resulted in "Einstein" becoming synonymous with "genius".

Born	March 14, 1879, Ulm, Germany
Died	April 18, 1955, Princeton, New Jersey, United States
Employer	University of Bern, Swiss Federal Institute of Intellectual Property, University of Zurich, German University in Prague, ETH Zürich, Kaiser Wilhelm Society, Princeton University
Occupation	theoretical physicist, philosopher of science, inventor, science writer, pedagogue
Field of work	theoretical physics

Person Entity - Components

Person Entity Details

Storing all the persons and their relevant details

Search

Person and its relevant details available for search

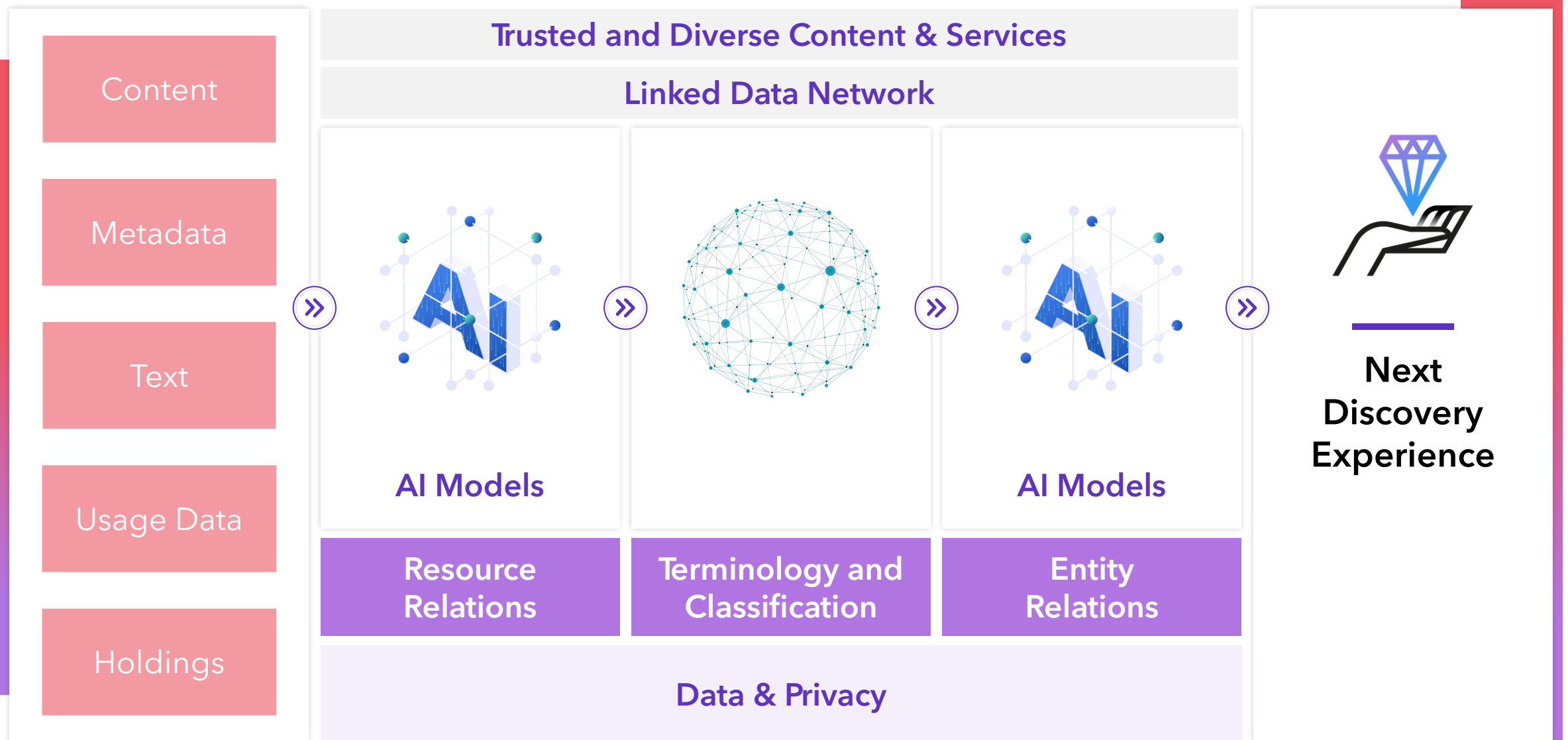
Autocomplete

New dedicated autocomplete, which includes the info we need for search and display

Relations

Creating relations between entities, like:
person to title
person to person

Thoughts on the Future of Linked Open Data and AI Together



Summary



Libraries are breaking out of their walls and boundaries



The library community is designing its future



Ex Libris is working with the community towards a linked future



There is lots we can do already!

Want to hear more? Talk to us!



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IGOLU
International Group of Ex Libris Users

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