Intro to Linked Data for Librarians

Extend the Reach of your Catalog

This guide is for librarians who maintain
data to make discovery more efficient.

What is Linked Data?

Linked Data is a protocol for publishing and connecting data on the web. It aims to identify things libraries talk about and build relationships between them. These "things" include:

- Concepts
- People
- Places
- Subjects
- Topics

What is Linked Data? cont.

Linked Data is connected data. It uses web technologies to structure data so it can be used by both humans and computers. It is a structure for connecting data with other data, so it becomes more useful. It allows meaningful connections to be created between various types of resources on the web. Linked Data is about exposing, sharing and connecting. It allows application and integration at scales never seen before.

All links are the building blocks of Linked Data. They are combined using a sentence structure that allows applications to understand what resources are.

For example, consider this sentence:

"All About Love: new visions is created by bell hooks."

The above sentence is telling us three "things:"

1. The Work is "All about love: new visions"

2. The Person is "bell hooks"

3. The Relationship: this Work is created by this Person

When structured for sharing on the web, this sentence is represented by three links:

1. **https://massey.library.link/resource/xVGQJU0XjKM/**

2. **https://massey.library.link/resource/NZoOFvP4VSE/**

3. **http://bibfra.me/vocab/lite/creator**

Why is Linked Data Needed?

The web is a collection of files lacking structure because HTML and the World Wide Web has its limits. To truly understand what data is used, applications must have a clear vision of people, places, concepts, etc. Search engines discover very little from unstructured data. Therefore, search engines and other applications (AI chatbots, Ok Google, Siri, Alexa) face the challenge of making sense of content so they can **serve relevant information to users.** Communities work on specific vocabularies like schema.org and BIBFRAME to describe their domains.

Benefits for Libraries and Their Users

Linked Data gives structure and more meaning to bibliographic data. The connections of structured Linked Data **make complex queries simple**. Linked Data enables the delivery of **integrated results** on the web by combining data from multiple authoritative sources and various contributors. Web technologies allow the integration of data from different sources to reveal hidden facts, so your researchers can get answers to complex queries easily. Linked Data enriches library data to **enhance discovery**. It allows meaningful connections of open data from the web to **expedite research**.

deliver integrated results

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expedite research

make complex queries simple
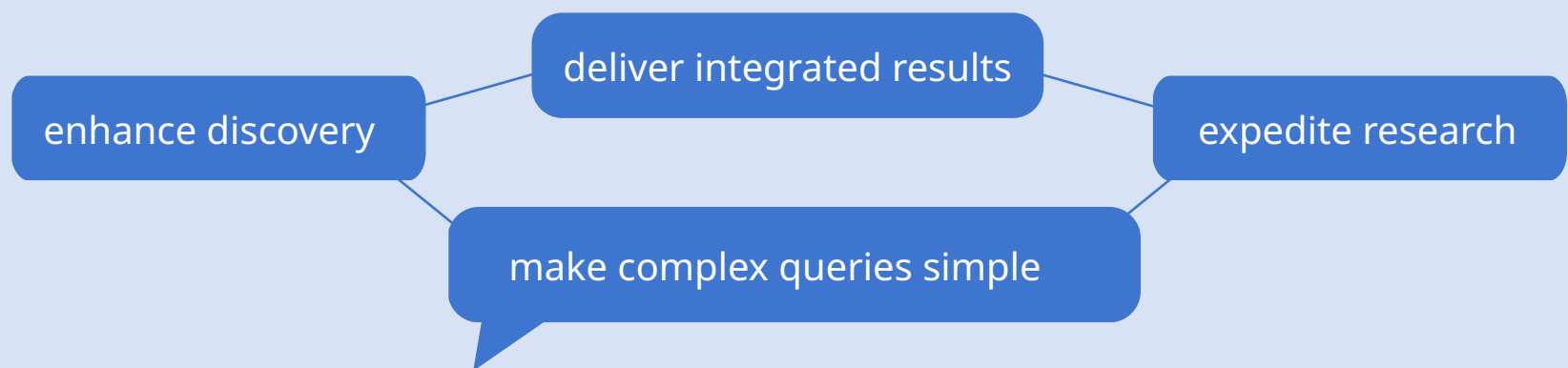
How can libraries expedite research?

BiblioGraph, EBSCO's Linked Data service, can use your MARC (MAchine Readable Cataloging) records to create BIBFRAME (Bibliographic Framework) structured resources. BIBFRAME is a Linked Data model for bibliographic description and was designed to use Linked Data principles to make bibliographic data more useful. It identifies real-world entities and concepts found in bibliographic data and exposes their relationships. EBSCO BiblioGraph can publish your data to an open network that enriches library data through a collaboration of thousands of libraries.

How can libraries expedite research? cont.

BiblioGraph allows libraries to publish linked data that is structured so that search engines and other applications can know about your library and what your library offers. Librarians can curate book lists and embed these on social media sites, course/learning management systems, LibGuides, institutional repositories and anywhere on the web. This allows users to easily find resources and go directly to the catalog from the web. BiblioGraph also syndicates data to Google so users can borrow your resources through Google Knowledge Panels and Google Books (offered in select countries, with more coming).

EBSCO BiblioGraph

Build new pathways to libraries by contributing to the Linked Data effort with EBSCO. Our BiblioGraph team has a strong background in leading web and data protocol initiatives that include partnerships with the World Wide Web Consortium (W3C), Schema.org, BIBFRAME, Google and more.

Link your data and make complex queries easy.

Learn more about EBSCO BiblioGraph

Resources:

Linked Data Glossary

Linked Open Data - What is it?

Tim Berners-Lee: The next Web of open, linked data

WEBDATAIOT. Why Structured Data and Linked Data is Critical for Search Engine Results

Linked Data, Wikipedia

Incubator Activity > W3C Library Linked Data Incubator Group. W3C

BIBFRAME (Bibliographic Framework). Librarianship Studies

Library.Link Network FAQ. Library.Link