

# The OpenSESMO Project: Making Non-Traditional Library Collections Discoverable in Search Engines with Social Media Metadata and Linked Data

DLF Forum 2016

Jason A. Clark and Doralyn Rossmann  
Montana State University

@jaclark  
@doralyn

"The library is not the starting point."  
"The campus is not the work location."  
"The proxy server is not the answer."

*Meeting Researchers Where They Start: Streamlining Access to Scholarly Resources.* Ithaka S+R and Roger C. Schoenfeld, 2015.

<http://www.sr.ithaka.org/publications/meeting-researchers-where-they-start-streamlining-access-to-scholarly-resources/>

# Meeting Users in the Search with ALL library information resources

# The Open SESMO Project (Search Engine & Social Media Optimization)

- Search Engine Optimization
- Social Media Optimization
- Linked Data

[Gmail](#) [Images](#)[Sign in](#)

# Google

[Google Search](#)[I'm Feeling Lucky](#)

About 283,000 results (0.20 seconds)

### Mergent - Creating Global Financial Solutions

[www.mherent.com/](http://www.mherent.com/) ▾

Mergent, Inc. is a leading provider of business and financial data on global publicly listed companies. Based in the U.S., the company maintains a strong global ...

[Profile](#) - [Mergent Online](#) - [News Reports](#) - [Careers](#)

### Mergent Online

[www.mergentonline.com/](http://www.mergentonline.com/) ▾

Mergent Online Content. U.S. Company Data. A fully searchable database with financials details of over 25,000 active and inactive companies ...

[About Mergent Online](#) - [Forgot your Username/Password](#) - [Contact Us](#) - [Feedback](#)

### Mergent Online : Montana State University (MSU) Library

[www.lib.montana.edu](http://www.lib.montana.edu) › [Resources](#) ▾ Montana State University Library ▾

★★★★★ 12,299 votes

Mergent Online provides access to company profiles and financial information with full text business profiles, quarterly and annual financials, EDGAR filings, and ...

### Mergent Archives

[www.mergentarchives.com/](http://www.mergentarchives.com/) ▾

Welcome to Mergent Archives™. Mergent Archives is an online database providing you with access to a vast, indexed collection of corporate and industry ...

### Mergent Intellect

[www.mergentintellect.com/](http://www.mergentintellect.com/) ▾

Intellect. Username. Forgot your Mergent Intellect ID ? Password. © 2016 Mergent, Inc. All rights reserved. EEO/AA/M/F/Vets/Disabled Version 3.0.24.

Home » Resources » About

## Mergent Online

---



**What is it?** Mergent Online provides access to company profiles and financial information with full text business profiles, quarterly and annual financials, EDGAR filings, and recent press releases and news wire reports. Updated daily.

**Liaison(s):**

Greg Notess

**Linked Data Topics:**

Accounting  
Business

**Related Databases:**

Vault Career Library  
Business Source Complete  
EconLit  
IBISWorld Industry Research Reports  
LexisNexis Academic

**Total interactions:** 12330

**Rank:** 18 out of 248 (based on 12330 out of 1323353 total interactions with all of our databases)

# The Experiment

- Same collection
- Apply optimizations in stages
- Compare analytics over time
- Goal: increased traffic and more nuanced, semantic understanding of content by search engines

[www.lib.montana.edu/resources](http://www.lib.montana.edu/resources)

# Results

# Initial snapshot

August 16, 2015 to September 12, 2015

versus

September 13, 2015 to October 10, 2015

13,881 total impressions to 54,172 total impressions

“Clickthrough Rates” and “Search Position” show growth

# User Growth

August 22, 2014 to November 4, 2016

Total users (audience - overview)

2014 - 11,833

2015 - 13,128

2016 - 24,657

# Organic Search Growth

August 22, 2014 to November 4, 2016

Search/Referrals for item pages (acquisition -  
source/medium)

2014 - 94

2015 - 3,659

2016 - 3,580

# Item Pages - Pageviews

August 22, 2014 to November 4, 2016

2014 - 2,924

2015 - 7,807

2016 - 13,191

# Item Pages - Exit Rates

August 22, 2014 to November 4, 2016

Pages per/session decrease  
and  
45% to 50% exit rate

# Wait, what... how?

# A Revised Website Architecture

- Collection Page [home page]
  - [www.lib.montana.edu/resources/](http://www.lib.montana.edu/resources/)
- About Pages [about page, topics page]
  - [www.lib.montana.edu/resources/about.php](http://www.lib.montana.edu/resources/about.php)
  - [www.lib.montana.edu/resources/topics.php](http://www.lib.montana.edu/resources/topics.php)
- Item Pages [individual record page]
  - [www.lib.montana.edu/resources/about/31](http://www.lib.montana.edu/resources/about/31)
- Sitemap and rel=canonical work
  - [www.lib.montana.edu/resources/sitemap.xml](http://www.lib.montana.edu/resources/sitemap.xml)

# Structured Data + Linked Data

- Schema.org Types
  - CollectionPage, AboutPage, ItemPage, Product
- OpenGraph and Twitter Cards
- Linked Data Vocabulary
  - DBpedia and External Enumerations markup

[Home](#) » [Resources](#) » [Index](#)

## Articles & Research Databases

[About](#)

### By Subject

[Browse databases & guides by subject](#)

### By Format

[Browse databases by format](#)

### Sitemap

[View database title list](#)

### Browse by title

[A](#) • [B](#) • [C](#) • [D](#) • [E](#) • [F](#) • [G](#) • [H](#) • [I](#) • [J](#) • [K](#) • [L](#) • [M](#) • [N](#) • [O](#) • [P](#) • [Q](#) • [R](#) • [S](#) • [T](#) • [U](#) • [V](#) • [W](#) • [X](#) • [Y](#) • [Z](#)

[Suggested](#)   [Popular](#)   [Recently Added](#)

### Good Starting Points

[Academic Search Complete](#) ...

[CatSearch](#) ...

[Google Scholar](#) ...

[InfoTrac PowerSearch](#) ...

[Web of Science](#) ...

Search for databases





## By Topic: Articles & Research Databases

---

### Available Topics

<a href="#">Abstract (summary) (7)</a>	<a href="#">Academic journal (4)</a>	<a href="#">Accounting (4)</a>	<a href="#">Agriculture (14)</a>
<a href="#">Anthropology (5)</a>	<a href="#">Architecture (6)</a>	<a href="#">Art (7)</a>	<a href="#">Article (publishing) (41)</a>
<a href="#">Bibliographic database (9)</a>	<a href="#">Biography (6)</a>	<a href="#">Biology (14)</a>	<a href="#">Book review (8)</a>
<a href="#">Building code (3)</a>	<a href="#">Business (15)</a>	<a href="#">Chemical structure (4)</a>	<a href="#">Chemistry (6)</a>
<a href="#">Citation index (2)</a>	<a href="#">Civil Engineering (1)</a>	<a href="#">Composition studies (1)</a>	<a href="#">Computer science (5)</a>
<a href="#">Criminal justice (2)</a>	<a href="#">Data set (10)</a>	<a href="#">Database (133)</a>	<a href="#">Dictionary (1)</a>
<a href="#">Digital audio (7)</a>	<a href="#">E-book (6)</a>	<a href="#">Economics (9)</a>	<a href="#">Education (15)</a>
<a href="#">Electrical engineering (3)</a>	<a href="#">Employment (2)</a>	<a href="#">Encyclopedia (6)</a>	<a href="#">Engineering (18)</a>
<a href="#">English (14)</a>	<a href="#">Environmental science (10)</a>	<a href="#">Film (4)</a>	<a href="#">Full text database (26)</a>
<a href="#">Gender Studies (3)</a>	<a href="#">Genealogy (5)</a>	<a href="#">Geography (5)</a>	<a href="#">Geology (3)</a>
<a href="#">Handbook (2)</a>	<a href="#">Health (20)</a>	<a href="#">History (49)</a>	<a href="#">Human Development (humanity) (2)</a>
<a href="#">Image (1)</a>	<a href="#">Images (2)</a>	<a href="#">Interdisciplinarity (12)</a>	<a href="#">Interdisciplinary (36)</a>
<a href="#">Law (4)</a>	<a href="#">Literature (4)</a>	<a href="#">Map (2)</a>	<a href="#">Math (1)</a>
<a href="#">Mathematics (3)</a>	<a href="#">Medicine (4)</a>	<a href="#">Modern Languages (3)</a>	<a href="#">Music (10)</a>
<a href="#">News (15)</a>	<a href="#">Open access journal (2)</a>	<a href="#">Paleontology (1)</a>	<a href="#">Philosophy (1)</a>
<a href="#">Photography (4)</a>	<a href="#">Physics (5)</a>	<a href="#">Political science (18)</a>	<a href="#">Primary source (16)</a>
<a href="#">Psychology (12)</a>	<a href="#">Reference work (23)</a>	<a href="#">Religious studies (3)</a>	<a href="#">Sheet music (3)</a>
<a href="#">Sociology (2)</a>	<a href="#">Statistics (4)</a>	<a href="#">Thesis (3)</a>	<a href="#">Video (16)</a>
<a href="#">Writing (2)</a>			

## About: Library Articles and Research Databases Collection

The Montana State University (MSU) Library Articles and Research Database collection contains over 240 [databases](#) which include over 100,000 [magazines](#), [periodicals](#), [serials](#) and [journals](#) and more than 250,000 [e-books](#). Additional materials include [peer-reviewed](#) articles, [sound recordings](#), film and video recordings, [newspapers](#), business and industry information, maps, data, tutorials, and book reviews. These resources cover subjects such as [agriculture](#), [architecture](#), [art](#), [biography](#), [genealogy](#), [biology](#), [books](#), [reading](#), [business](#), [chemical engineering](#), [biological engineering](#), [chemistry](#), [biochemistry](#), [children's literature](#), [civil engineering](#), [computer science](#), [earth sciences](#), [ecology](#), [English](#), [environmental science](#), [film](#), [photography](#), [government information](#), [health](#), [human development](#), [history](#), and [law](#). Other topics found include [math](#), [statistics](#), [mechanical engineering](#), [industrial engineering](#), [modern languages](#), [music](#), [Native American studies](#), [nursing](#), [medicine](#), [philosophy](#), [physics](#), [political science](#), [psychology](#), [religious studies](#), [sociology](#), [criminal justice](#), [women's studies](#), [gender studies](#), [sexuality studies](#), [writing](#), [composition](#), [reference](#), and [multidisciplinary areas](#).

These resources are made available to the faculty, staff, graduate students, and [undergraduate students](#) of [Montana State University](#) and [Gallatin College](#). Additionally, individuals from the [Bozeman area](#) community may walk-in to the Renne Library to use these resources inside the library building.

MSU Library provides access to these resources in support of the teaching and research of its [Gallatin County](#) community. These items are made accessible on campus and anywhere with an Internet connection, whether from a dorm room, a coffee shop, a cell phone, or a wireless connection. These resource subscriptions are funded by [Montana State University Library](#) in support of the University's mission.

Home » Resources » About

## Mergent Online

---



**What is it?** Mergent Online provides access to company profiles and financial information with full text business profiles, quarterly and annual financials, EDGAR filings, and recent press releases and news wire reports. Updated daily.

**Liaison(s):**

Greg Notess

**Linked Data Topics:**

Accounting  
Business

**Related Databases:**

Vault Career Library  
Business Source Complete  
EconLit  
IBISWorld Industry Research Reports  
LexisNexis Academic

**Total interactions:** 12330

**Rank:** 18 out of 248 (based on 12330 out of 1323353 total interactions with all of our databases)

# Social Media Optimization

Before....



Looking for high-quality art images? ArtStor includes architecture, painting, sculpture, photography, design, & more  
[lib.montana.edu/resources/about...](http://lib.montana.edu/resources/about-artstor)

After...



Looking for high-quality art images? ArtStor includes architecture, painting, sculpture, photography, design, & more

A screenshot of the ARTstor website. The top navigation bar includes links for 'About', 'Artstor Digital Library', 'Shared Shelf', 'News', 'Initiatives', 'Resources', and 'Help'. Below the navigation is a horizontal menu with categories: 'Paintings', 'Fusion & Context', 'Contemporary Art', 'Folk Art', and 'Resources for Librarians'. A banner for 'CONTEMPORARY ART The Emilio Sanchez Foundation' is displayed, featuring four small images of artworks. Below the banner is a section titled 'ARTstor - Montana State University (MSU) Library' with the text: 'ARTstor is a database of art images. Its primary purpose is the creation and provision of digital images and related materials for scholarly and educational use...'. A link to 'lib.montana.edu' is provided. At the bottom of the screenshot, there is a social media interaction summary: 'RETWEETS 3', 'LIKE 1', and icons for sharing on various platforms.

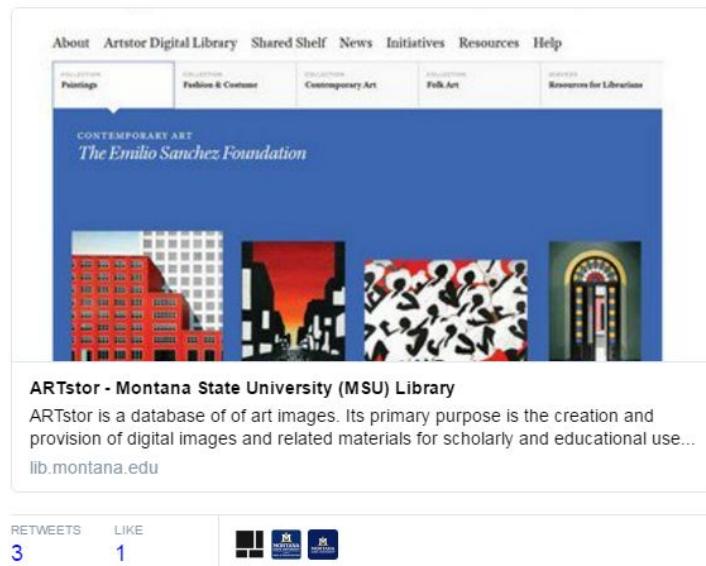
2:20 PM - 15 Oct 2015



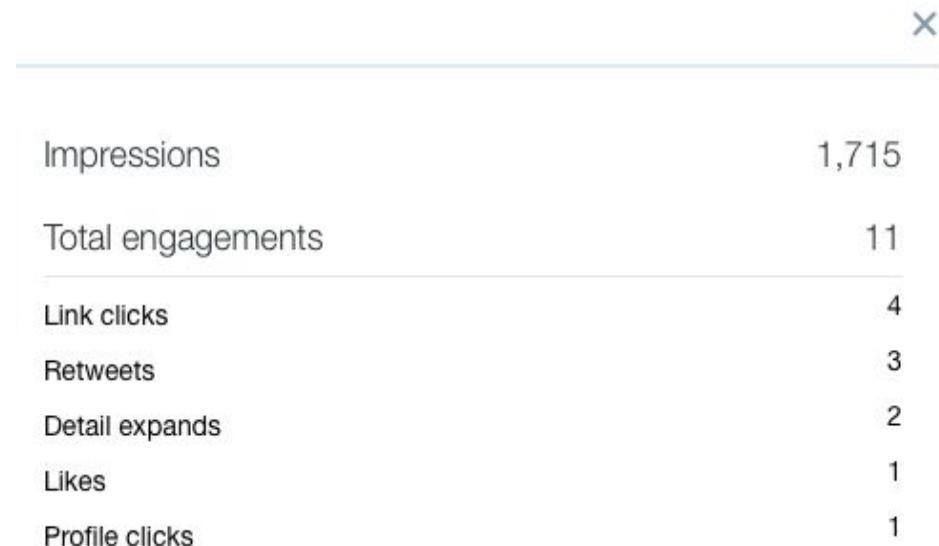
# Twitter Analytics



Looking for high-quality art images? ArtStor includes architecture, painting, sculpture, photography, design, & more



2:20 PM - 15 Oct 2015



New opportunity to connect with  
community - in the search

# Thanks!

**Jason A. Clark**

Head, Library Informatics & Computing  
Montana State University Library  
@jaclark

**Doralyn Rossmann**

Administrative Director, Data Infrastructure and Scholarly Communication  
& Head, Collection Development  
Montana State University Library  
@doralyn