

# Evaluation and evolution of the Share-VDE 2.0 linked data catalog

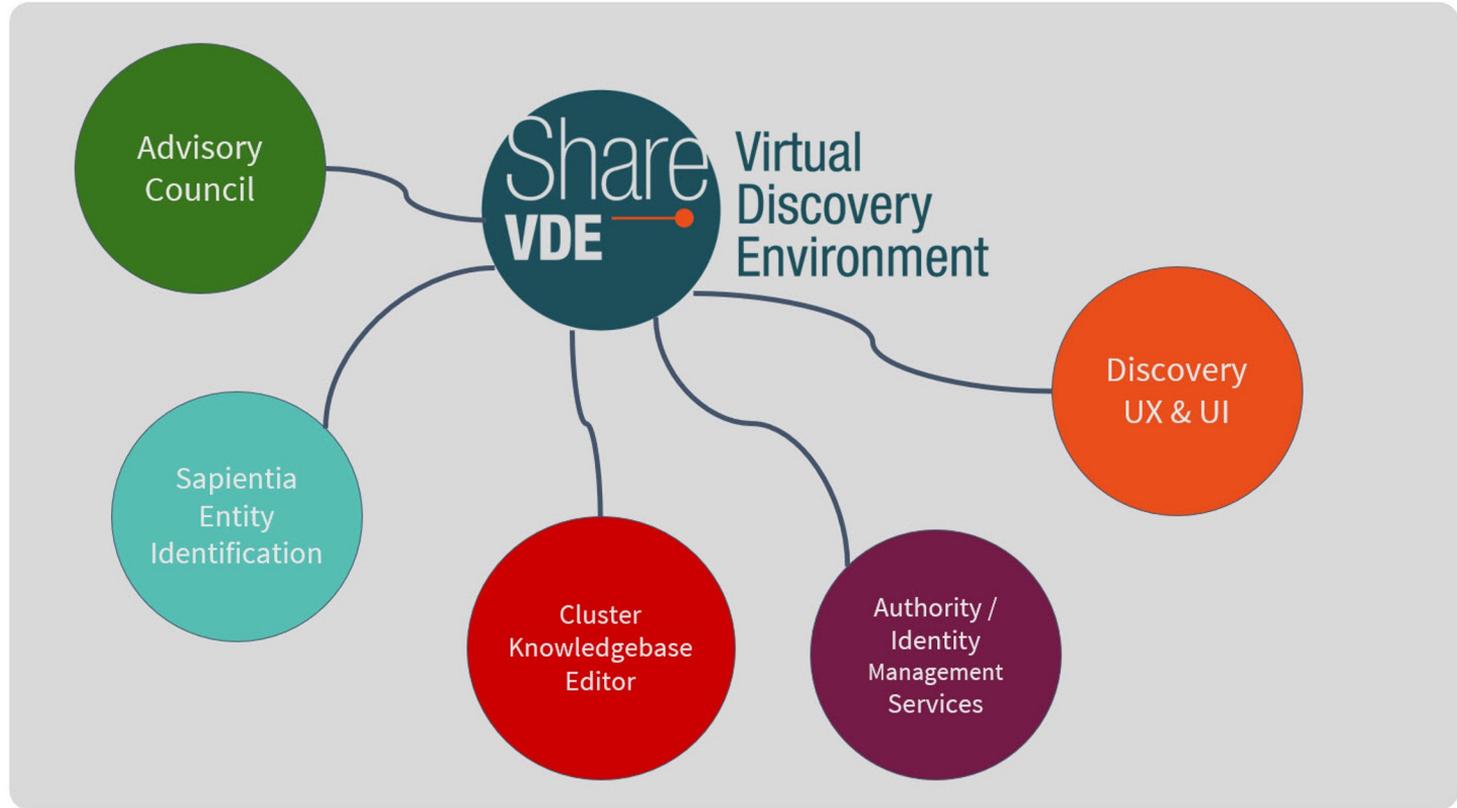
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# Background - What is Share-VDE?

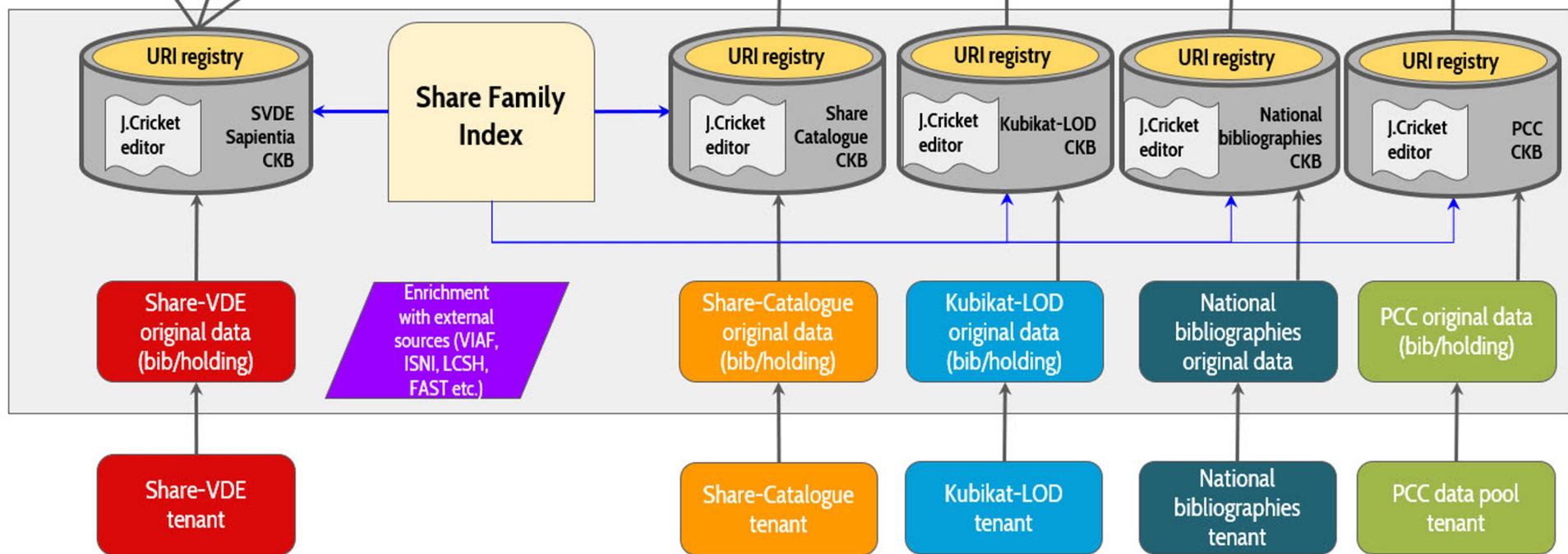
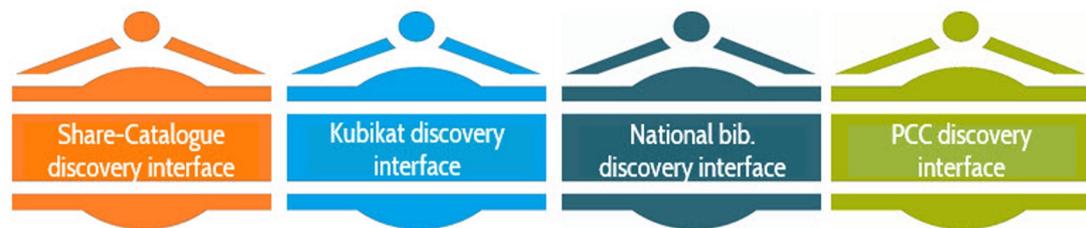
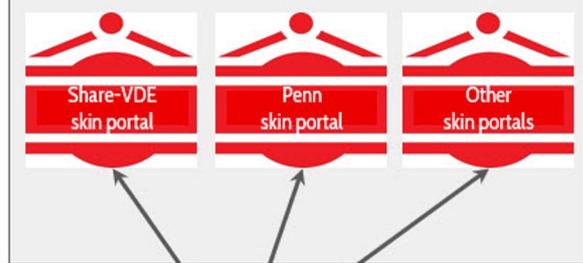
- ▶ Community
  - ▶ Libraries in partnership with Casalini Libri and @Cult
  - ▶ Share Family of LOD projects
- ▶ Technology
  - ▶ Leader in library LOD & BIBFRAME since 2016
  - ▶ Suite of tools & services supporting LOD for libraries
- ▶ Discovery
  - ▶ LOD Discovery Environment: <https://www.svde.org/>

# Share-VDE Groups



# Share Family tenant infrastructure

## Share-VDE User Interface



# Share-VDE Suite of Tools and Services

- Data conversion service: MARC to BIBFRAME
- Member-developed data model
- Sapiaientia Cluster Knowledge Base
- J.Cricket Editor
- Entity-based BIBFRAME catalog <https://www.svde.org/>

# What is Share-VDE to Users?

Who can see your viewing activity? × =728%2C857%2C0.47&scaling=min-zoom&ks... ☆

Super Editions and... List of Warriors boo... Life Science & Biom... Penn Email My Drive - Google... Fall 2022 2nd Year

Penn testing mockups A Log in or create account Options

https://penn.svde.org/en/19324029352385/works-about

Penn Libraries Catalog Search all content...

Topic

## Civil rights movement

1954–1968 U.S. social movement against institutional racism

"The civil rights movement was a political movement and campaign from 1954 to 1968 in the United States to abolish institutional racial segregation, discrimination, and disenfranchisement throughout the United States. The movement had its origins in the Reconstruction era during the late 19th century, although it made its largest legislative gains..." — [Wikipedia](#)



Wikimedia

Options

- Works about this
- Topics and events related to this
- Related people and organizations

Lorem ipsum Year Creator Genre Sort by: Title A-Z

241 results Improve performance by enabling hardware acceleration Learn more

Audio Transcript

Chat Messages

topics and events related to this

the top three selections for this tab. So that kind of indicates to me that it's pulling out really big, important events that it wants you to focus on necessarily. Uh, it also seems like it might be organizing it by

How many people have clicked on this topic, so

that might be how it's ranking them in terms of one through eight here.



Katherine Ahnberg 05:07

Hmm. What makes you think that specifically

# User Studies

In the past year two studies gathered direct user input from Penn users. UX testing focused on **task analysis, prototype testing and feedback, usability benchmarking, and stakeholder interviews.**

## Testing Cycle 2

**Environment:** Mockups (Figma)  
**Focus:** prototype testing (concept pages), SUPR-Q metric, SVDE in context  
**Mode:** Recorded Zoom screen share  
**Participants:** 5  
**Tasks:** 3  
**Recorded hours:** 2.5  
**Date:** Fall 2022 (ongoing)

## Testing Cycle 1

**Environment:** svde.org (Beta)  
**Focus:** usability, disambiguation, exact title matching, exploratory tasks, UI terminology  
**Mode:** Recorded Zoom screen share  
**Participants:** 5  
**Tasks:** 6  
**Hours:** 3+  
**Date:** Spring 2022

# User Studies

## User Testing Cycle 2: Participant Profiles

	User 1	User 2	User 3	User 4	User 5
Campus role	Graduate student, Veterinary School	Faculty, East Asian languages and Civilizations	Research coordinator, oncology	Undergraduate, East Asian Languages and Civilizations	Doctoral student, Criminology
Experience level searching online library catalogs (self assessed, scale)	Some experience	A lot of experience	A lot of experience	Some experience	Some Experience
When you want to get started with the basics of a topic, the <b>background information</b> , where online would you start your search?	Google, Google Scholar	Google, museum and auction house collections	Google	Library catalog, Google Scholar	Google
When you're trying to <b>find works related to something</b> you've read or used where do you typically go to find them?	Bibliographies	Bibliographies, Bibliography of Asian Studies, JSTOR	Bibliographies (article)	Bibliographies, JSTOR	Bibliographies, LexisNexis

## We asked users:

Can you  
briefly  
describe what  
this catalog  
does?

“I would say that it kind of **it parses resources and sources into different categories.** So you can learn about a given topic from like primary sources or secondary tangential sources.” (User 3- Research Coordinator)

“It allows you to search for articles and information based on a key topic or event that you’re looking into. It also gives you information on them, people or places that are relevant to your topic. And you can find articles that are **all linked together by subgrouping or by general topic.**” (User 1- Graduate Student)

“This catalog of works like a card catalog in a library, back in the old days in that **it includes links that let you get to information that you need about the particular kind of [topic] it presents.**” (User 2- Adjunct Faculty)

# We asked users:

If you were looking for information related to this subject, what do you think “Topics and events related to this” might mean?

- Expectation matched content
- Described by users as topic milestones and research touchstones

Would you find “Topics and events related to this” be useful or not useful?

- All users responded positively

Is the information describing these “Topics and events related to this” clear or not clear?

Type:

- “Riot” vs “Demonstration”
- Concept page vs. work unclear

The screenshot shows the Penn Libraries Catalog search results for the topic "Civil rights movement". The page features a search bar at the top right, a breadcrumb trail "Topic", and a main heading "Civil rights movement" with a subtitle "1954–1968 U.S. social movement against institutional racism". A Wikipedia quote is provided. Below the heading, there are three filter tabs: "Works about this", "Topics and events related to this" (highlighted in yellow), and "Related people and organizations". A search filter section includes a text input "Lorem ipsum", buttons for "Type", "Year", and "Location", and a "Sort by: Title A-Z" dropdown. The results section shows "47 results" in a table with columns for No., Image, Concept, Type, Description, and Location. The third result, "Ole Miss riot of 1962", is highlighted in yellow. Other results include "Selma to Montgomery marches", "I Have a Dream", "Civil rights movement in South Carolina", "Civil rights movement in Omaha, Nebraska", and "Council of Federated Organizations".

Topic

## Civil rights movement

1954–1968 U.S. social movement against institutional racism

“The civil rights movement was a political movement and campaign from 1954 to 1968 in the United States to abolish institutional racial segregation, discrimination, and disenfranchisement throughout the United States. The movement had its origins in the Reconstruction era during the late 19th century, although it made its largest legislative gains...” — [Wikipedia](#)

Options ▾

Works about this   **Topics and events related to this**   Related people and organizations

Search: Lorem ipsum   Type   Year   Location   Sort by: Title A-Z ▾

47 results

No.	Image	Concept	Type	Description	Location
1		<a href="#">Selma to Montgomery marches</a>	Demonstration	1965 march for African-American citizens to exercise their constitutional right to vote	<a href="#">Selma, Alabama (USA)</a> <a href="#">Montgomery, Alabama (USA)</a>
2		<a href="#">I Have a Dream</a>	Speech	1963 speech delivered by Martin Luther King Jr.	<a href="#">Lincoln Memorial, Washington, D.C. (USA)</a>
3		<a href="#">Ole Miss riot of 1962</a>	Riot	Dispute over integration at University of Mississippi	<a href="#">Oxford, Mississippi (USA)</a>
4		<a href="#">Civil rights movement in South Carolina</a>	Social movement	1950–1970 social movement in South Carolina, United States	<a href="#">South Carolina (USA)</a>
5		<a href="#">Civil rights movement in Omaha, Nebraska</a>	Demonstration	1965 march for African-American citizens to exercise their constitutional right to vote	
6		<a href="#">Council of Federated Organizations</a>	Coalition	Coalition of advocacy groups in the Civil Rights Movement	
7		<a href="#">Freedom Summer</a>	Political	1964 volunteer campaign in the	

# We asked users:

What do you think “Original Works by” and “Publications by” could mean in relationship to the information on this page?

- Successful distinction between works and publications
- User suggestion- list published works first as context clue
- User suggestion- consolidate and works and publications and filter by type

If you were looking for information about this person, would “Related topics and events” be useful or not useful?

- All users responded positively
- “I think it would be super helpful to scroll through this related topics and events tab to figure out why [Martin Luther King Jr.] was relevant and what exactly he had a role in doing. Why, he’s a prominent figure in history (graduate student).”

Penn Libraries Catalog beta

Person

## Martin Luther King Jr.

American civil-rights activist and leader (1929–1968). Born in Atlanta (Ga.). Died in Memphis (Tenn.).

“Martin Luther King Jr. was an American Baptist minister and activist, one of the most prominent leaders in the civil rights movement from 1955 until his assassination in 1968. An African American church leader and the son of early civil rights activist and minister Martin Luther King Sr., King advanced civil rights for people of color in the United States...” — [Wikipedia](#)

Options ▾

Original works by  Publications by  Original works about  Related topics and events

Lorem ipsum     Sort by: Title A-Z ▾

47 results

No.	Image	Concept	Type	Description	Location
1		<a href="#">COINTELPRO</a>	Government program	Series of covert, and often illegal, projects conducted by the U.S. FBI	
2		<a href="#">Assassination of Martin Luther King Jr.</a>	Political murder	1968 murder of Martin Luther King Jr.	<a href="#">Memphis, Texas (USA)</a>
3		<a href="#">Martin Luther King Jr. Day</a>	Topic	United States federal holiday	<a href="#">USA</a>
4		<a href="#">Funeral of Martin Luther King, Jr.</a>	Topic	Funeral following the assassination of Martin Luther King Jr.	

# We asked users:

At what points in your research process could it be useful to connect with this resource?

“I would use this as a **first line source when starting a research paper**. I would look at this first and then click on specific articles and kind of go from there and if I found an article I liked I would look in the works cited of that (graduate student).”

“I think this would be useful in the **beginning to middle phases** when I was looking a material related to a specific topic. When I’m looking for lots and lots of details about something...as I was **starting to narrow down my search topic** (faculty). “

“It really helps you orient to a topic, and **unlike a search engine you don’t miss seminal events** (researcher).”

Place

## Selma, Alabama (USA)

City in and county seat of Dallas County, Alabama, United States

“Selma is a city in and the county seat of Dallas County, in the Black Belt region of south central Alabama and extending to the west. Located on the banks of the Alabama River, the city has a population of 17,971 as of the 2020 census. About 80% of the population is African-American.” – [Wikipedia](#)



[Wikimedia](#)

Options ▾

Works about this place

**Events that took place here**

Related people and organizations

Works published here

Sort by: Title A-Z ▾

47 results

No.	Image	Concept	Type	Description	Location
1		<a href="#">Selma to Montgomery marches</a>	Demonstration	1965 march for African-American citizens to exercise their constitutional right to vote	<a href="#">Selma, Alabama (USA)</a>
2		<a href="#">Battle of Selma</a>	Battle	Battle of the American Civil War	<a href="#">Selma, Alabama (USA)</a>

## Adapted SUPR-Q (Standardized User Experience Percentile Rank Questionnaire)

Design metric functioning as a snapshot that captures:

Category	Score	1-5 scale where 5 = strongly agree	U1	U2	U3	U4	U5
Usability	4.2	Overall, this catalog seems easy to use	4	4	4	5	4
	4.5	It would be easy to navigate within this catalog	5	4	4	5	4.5
Trust and credibility	4.25	I would feel comfortable finding library materials here	1 (study limitation)	5	5	3	4
	4.4	I would feel confident that the materials I found would meet my research needs	4	4	5	4	5
Appearance	3.7	I find the design of this catalog to be attractive	4	3	4.5	3	4
	4.8	This catalog has a clean and simple presentation	5	4	5	5	5
Engagement	4.25	Given a choice, I would like to use this catalog in the future	5	4	3 (study limitation)	4	4

# Next steps

What we found. Where we are going.

# SVDE support for the LRM User Task -- Explore

To discover resources using the relationships between them and thus place the resources in a context...

SVDE support to understanding:

“... the structure of a subject domain and its terminology” (p.99)

Chapter 6 of IFLA's LRM document on mapping LRM user tasks.

<https://www.isko.org/cyclo/lrm#3>

# LRM user tasks more broadly...

"LRM defines five user tasks lists the goals users want to reach when performing the tasks. The term resource is used in its broadest sense, meaning an instance of any entity defined in the model. Find, Identify, Select, Obtain, Explore

*The tasks are listed in an order that reflects typical user behavior, which does not mean that all tasks need to be performed and that they cannot be repeated. Particularly identify and obtain often occur in parallel and in interaction."*

[IFLA Library Reference Model \(LRM\) Harmonisation of the FRBR Family](#)

# LRM user tasks

Find	Identify	Select	Obtain	Explore
To bring together information about one or more resources of interest by searching on any relevant criteria	To clearly understand the nature of the resources found and to distinguish between similar resources	To determine the suitability of the resources found, and to be enabled to either accept or reject specific resources	To access the content of the resource	<b>To discover resources using the relationships between them and thus place the resources in a context</b>

# Next steps

Integration of explore task support through:

- SVDE APIs
  - Entity based autocomplete
- BibCard Implementation
  - Authors

# Conclusion

Broadly looking to incorporate design patterns that can better support exploration tasks. SVDE is well suited to help users find context while navigating collections.

- **Type-ahead and entity suggestions** from SVDE API within our Bento (multi-search box) provides search assistance to users over a variety of search targets.

Search assistance can dynamically suggest alternative terms, query reformulations, and possibly “best bets,” search suggestions in a discovery layer. This functionality can draw on Share-VDE APIs. Relies on Share-VDE infrastructure to dynamically pull in search assistance data.

# Thank you and questions

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# Works consulted

Riva, Pat, Le Boeuf, Patrick, & Žumer, Maja. (2017). *IFLA Library Reference Model: A Conceptual Model for Bibliographic Information*, [https://www.ifla.org/files/assets/cataloguing/frbr-lrm/ifla-lrm-august-2017\\_rev201712.pdf](https://www.ifla.org/files/assets/cataloguing/frbr-lrm/ifla-lrm-august-2017_rev201712.pdf)

Žumer, Maja, (2017). IFLA Library Reference Model (LRM): Harmonisation of the FRBR Family. *ISKO Encyclopedia of Knowledge Organization*, <http://www.isko.org/cyclo/lrm>