

Digital Scholarship Ecosystems for Open Science

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DRC

Identity Management Syste

Repository

Elect

DSPACE

Online Institutional Digital Collections Reposite

What is a Digital Scholarship Ecosystem for Open Science?

Network of Several Software Components to Enable Research Faculty and Graduate Students and Raise Research Profiles



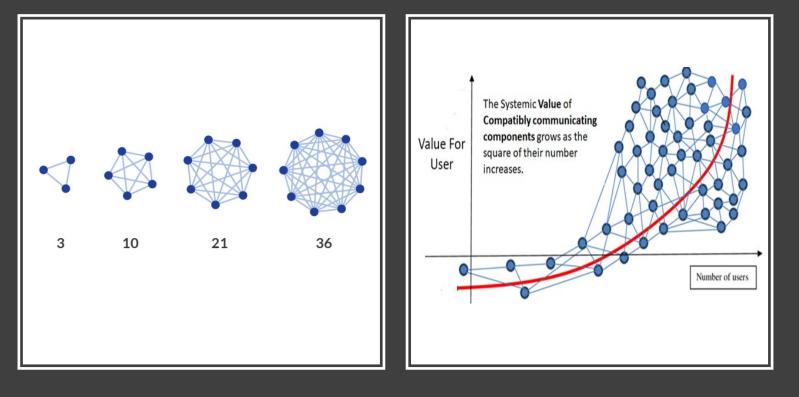
Identity Management System

VIREO

Volume Research Data Repository

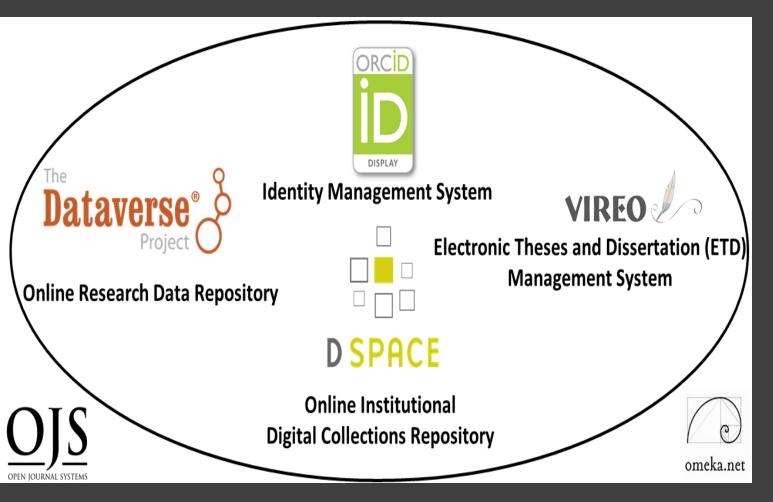
Identity Management System

Identity Management S



Simple Larger Idea

Collocating Open Source Digital Components in a Networked Research Ecosystem Enables Larger Connections and/or Network Effects raising the value for the researcher



What are the General Characteristics of this Digital Scholarship Ecosystem?



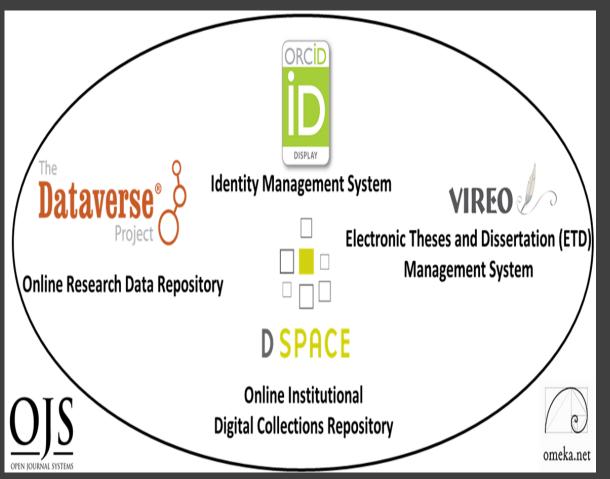
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Open Source Software

Active Developer Communities



Customizable Components



Digital Scholarship Ecosystem Consists of Six Open Source Software Components

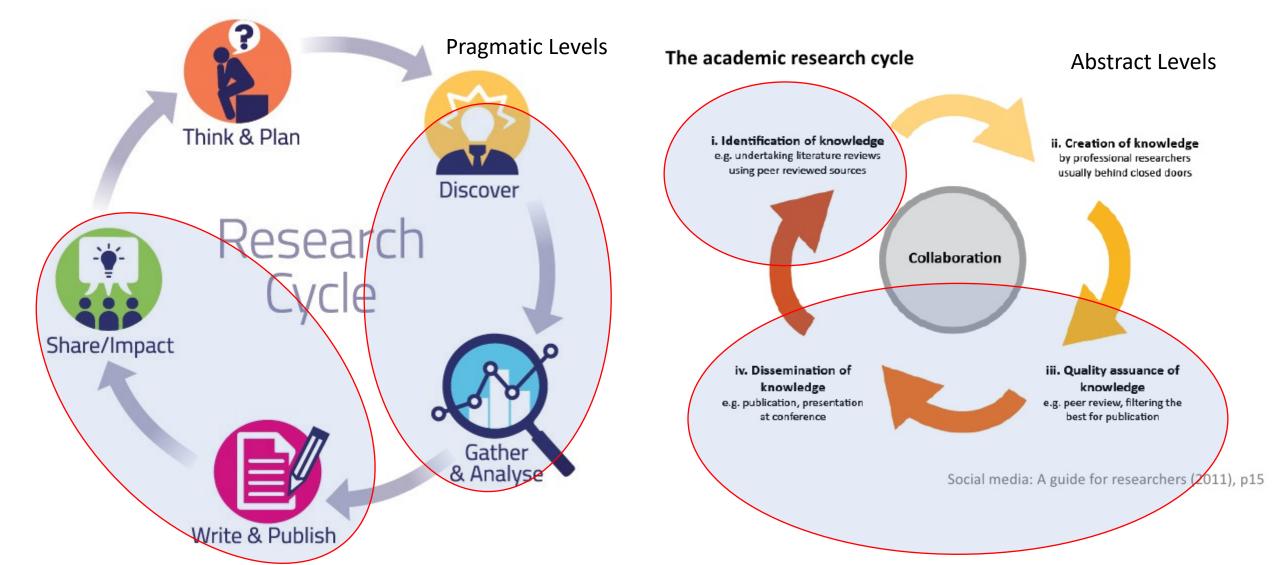
2 PRIMARY

- Research Data Repository
- Digital Collections Repository

4 TERTIARY

- Electronic Thesis and Dissertation Management System
- Identity Management System
- Open Academic Journal Software
- User Interface/Content Management Software

Digital Ecosystem Components Together Enable the Academic Research Cycle



#1 Research Data Repository

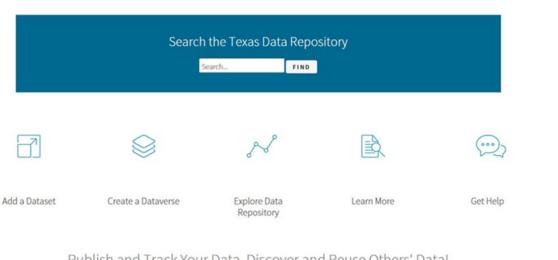
Texas State University Dataverse

A platform for publishing and archiving Texas State University's research data.

Dataverse

TEXAS UNIVERSITY LIBRARIES





Documentation

Publish and Track Your Data, Discover and Reuse Others' Data!

POWERED B Datave

https://dataverse.tdl.org/dataverse/txstate



#2 Digital Collections Repository (Dspace)

Organizes, centralizes and makes accessible research and knowledge generated by the institution's research community (Research Faculty and Graduate Students):

Pre-prints Faculty Publications White Papers Conference Presentations Graduate Student Theses and Dissertations

Tertiary Components

(OJS3, Vireo, Omeka & ORCID)



Open Access Academic Journal Software for refereed online journal creation and connections with background research and datasets (i.e. Dataverse/Dspace)



Electronic Thesis and Dissertation Management System bridging the Graduate School Review process and connecting with the Collections and Data Repositories



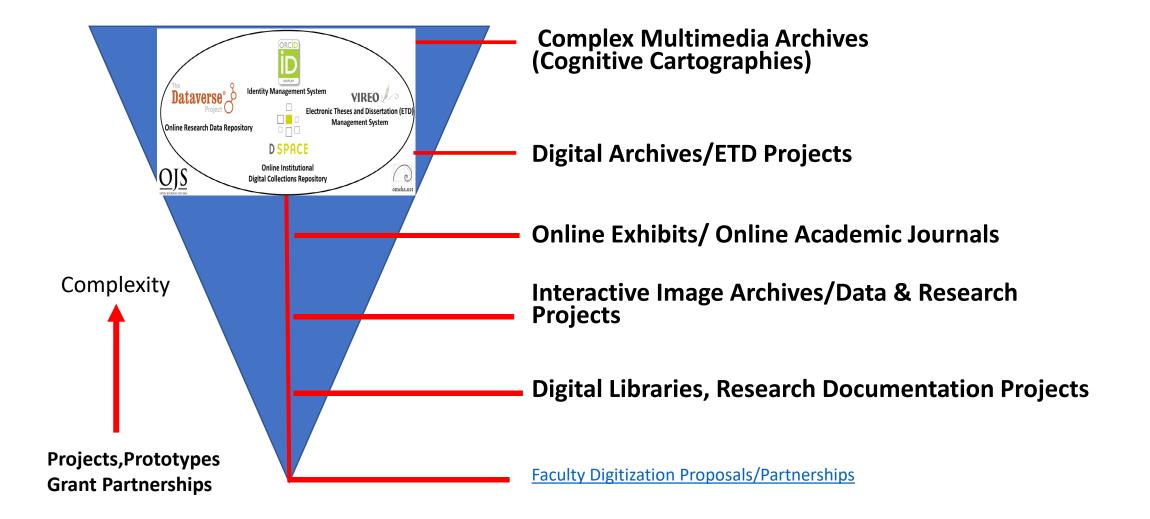
User Interface/Content Management Software providing a gateway for complex research projects - linking text, image media and datasets.



Research Identity Management System giving researchers Unique ORCID ID's to disambiguate names and allow aggregation of research profiles.

Together, These Research Ecosystem Components

Open Amazing Possibilities For Digital Scholarship & Collaboration Opportunities



Assessment and Results

Quantitative and Qualitative Measures

Ecosystem
Implemented
in Stages,
2014-2019

System	2014	2015	2016	2017	2018	2019
Downloads	1	-1	1			
DSpace	326,762	318,742	385,163	341,224	972,359	1,010,349
ETDs	136,985	158,240	200,373	328,420	470,437	505,658
Dataverse	n/a	n/a	n/a	455	3,451	2,043
Number of It	- 1					
DSpace	1,340	1,437	1,546	1,660	2,135	2,720
ETDs	967	1,174	1,326	1,581	1,789	2,218
Dataverse	n/a	n/a	n/a	28	33	53
ORCID IDs		·		•		•
ORCID	101	190	316	438	545	669
Hosted Journ	als	1	1	•		
					3	

Annual Usage Growth (Downloads, Number of Items, ORCID ID's and Hosted Journals)



LibQual Biannual Survey 2013-2019, Faculty and Student System Perceptions, Comments Further References, Papers & Working Examples

Uzwyshyn, R. 2020 Developing an Open Source Digital Scholarship Ecosystem (Preprint). ICEIT2020. Oxford, UK. https://www.researchgate.net/publication/336923249 Developing an Open Source Digital Scholarship Ecosystem

Texas State University Libraries Website. https://www.library.txstate.edu/ Texas State Digital Collections Repository https://digital.library.txstate.edu/ Texas State Data Research Repository https://dataverse.tdl.org/dataverse/txstate Texas State Online Research Identity Management System: https://guides.library.txstate.edu/researcherprofile/orcidTexas State Electronic Thesis and Dissertation Management (VIREO): https://www.tdl.org/etds/ Texas State Digital & Web Services: https://www.library.txstate.edu/services/faculty-staff/digital-web

services.html

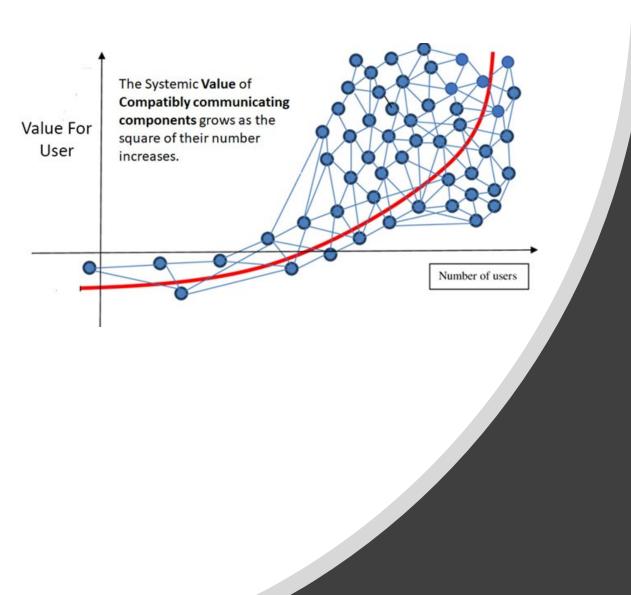
Further Links to Open Source Software & Downloads • **Dspace** <u>https://duraspace.org/dspace/</u>

- Dataverse https://dataverse.org/
- Omeka
 <u>https://omeka.org/</u>

• Open Journal Systems 3 https://pkp.sfu.ca/ojs/

ORCID
 <u>https://orcid.org/</u>

• Vireo https://www.tdl.org/etds/



Questions, Comments

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