

Beyond Connectivity: Simplifying Open Infrastructure Discovery and Adoption with Infra Finder

Sarah Lippincott Senior Researcher, IOI sarahl@investinopen.org

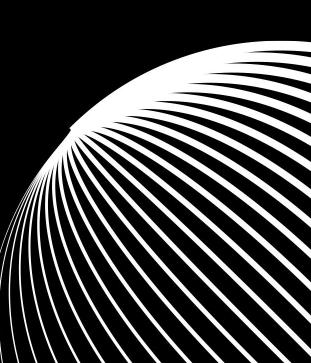
EGI2024 October 3, 2024

investinopen.org | @investinopen We work to increase the investment in and adoption of open infrastructure to further equitable access to and participation in research.



Invest in Open Infrastructure

> For open knowledge to flourish, our systems also need to be open. Our work seeks to advance a vision where **open infrastructure is the default in research and scholarship.**



Who we are

We bring deep experience to how we source, assess, and support projects.



Kaitlin Thaney Executive Director

- Wikimedia Endowment
- Mozilla Foundation
- Digital Science
- Creative Commons



Emma Green **Business Development &** Partnerships Lead

- Delta Think
- Hindawi

Business Development & Partnerships Lead

- GÉANT
- Ministry of Foreign Affairs and International Cooperation, Republic of South Sudan



Chrvs Wu Product Lead

- GitHub
- O'Reilly Media
- The New York Times
- Hacks/Hackers



Gail Steinhart Research Data Analyst

- Atmire
- Cornell University Library
- arXiv



- University of Pittsburgh Library System
- Linguistic Society of America



- 2SCALE
- Amani Institute
- Ol Peieta Conservancy



Katherine Skinner Research Lead

- Educopia Institute
- The Maintainers
- Software Preservation Network
- Library Publishing Coalition



Emmy Tsang **Engagement Lead**

- eLife
- TU Delft Library
- European Molecular Biology Laboratory



Nicky Wako



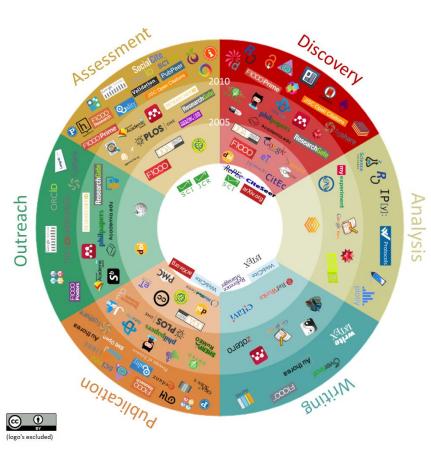
What do we mean by Open Infrastructure?

Infrastructure

Digital infrastructure that the academic ecosystem needs in order to perform its functions throughout the research lifecycle. A service, protocol, standard or software.

Open

We view open as spectrum, rather than binary. Our focus is on services that are open-source, distribute open access content, are free to use, are community-governed, and/or are non-profit.



Who are our Stakeholders?

Research Institutions

Infrastructure Providers

Policymakers

Funders

National and Regional Research & Education Networks

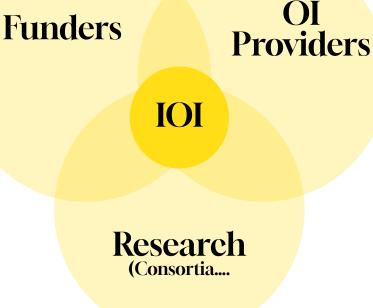
Scholarly societies and publishing organizations

R&D

Higher Education Institutions

Librarians

Shared digital infrastructure is critical to accelerating open science and driving innovation.



Challenges (Why do we do it)

Access to knowledge and data is critical to address global health challenges, climate change, economic development and more. Despite this shared belief, we're facing increased **consolidation of tools, content, and pricing that makes participation in research cost-prohibitive**.

Open infrastructures provide more inclusive, viable, and affordable solutions to further open and equitable science, but themselves face challenges in adoption and so sustainability.

Funding from philanthropy, government, & institutions empowers services to be **mission-oriented**.



Community-development and governance center **researchers' needs**.



Open source solutions can be interrogated, and built on and so **adapted** as needs change and grow.

Many alternatives exist to serve specific communities providing **choice** to institutions.



Services can be vulnerable to changes in leadership and can struggle with funding long-term operations and maintenance.

Communities are straddled with the cost of development without additional funding, leading to reliance on unpaid labor.

Resource constraints within adopters/infrastructures can mean that implementation and usability of open source solutions is costly and time-consuming.

Lack of sustainable funding models and low adoption rates can lead to unhealthy and unnecessary costs and competition.

What we do/How we seek to achieve our mission

Data Room

Evidence-based tools and products to support decision makers in adopting, developing, and investing in open infrastructure

Strategic Support

Targeted engagements toimplement IOI researchrecommendations, furtheradoption of openinfrastructure, and build theresilience and sustainabilityof the knowledge sector

Research-driven funding pilots to diversify the sources and mechanisms for funding open infrastructure and ensure a healthy, resilient, sustainable future for research and scholarship

Funding Pilots

IOI Mission

Three **core programs** working together to advance IOI's mission to **increase investment in and adoption of open infrastructure.** Across these programs, IOI **focuses on infrastructure that furthers open access to data and research**, in line with UNESCO's Open Science Declaration, the Barcelona Declaration, the Nelson memo, G7 Communique, and EU Council guidance.





Infra Finder: a new tool to facilitate the discovery and adoption of open infrastructure

infrafinder.investinopen.org



Up-to-date, verified information

IOI works closely with infrastructure service providers to keep Infra Finder up to date



Key information in a centralized location

Infra Finder showcases extensive information on the common areas of consideration for institutions and stakeholders



An easy-to-use comparison view

You can compare up to four infrastructure services side-by-side, with links to more detailed information.



Learn more about a solution

Overview

DSpace Lyrasis • United States of America DSPACE Website 7 Get in Touch 7 Pricing Info 7 About Mission Technical Community Policies Additional Information Funding About Launched: 2002 Record Updated: May 29, 2024 **Repository software** DSpace is a web application, allowing researchers and scholars to publish documents and data. While DSpace shares some feature overlap with content management systems and document management

DSpace shares some feature overlap with content management systems and document management systems, the DSpace repository software serves a specific need as a digital archives system, focused on the long-term storage, access and preservation of digital content thus making DSpace the software of choice for academic, non-profit, and commercial organizations building open digital repositories. It is free and easy to install "out of the box" and completely customizable to fit the needs of any organization.



Learn more about a solution

Technical attributes

Maintenance Status Open Code Repository **Technical Documentation** Actively Maintained ✓ Implemented ✓ Implemented Website 7 Website 7 **Open API Open Data Statement** Code License ✓ Implemented ✓ Implemented ✓ Implemented Website 7 Website 7 **Open Product Roadmap** ✓ Implemented Website 7 Code License: https://dspace.lyrasis.org/license/

Technical Attributes



Learn more about a solution

Governance

Policies & Governance

Governance Summary

<u>DSpace governance</u> is based on a representative, community-based membership model incrementally rewarding members who have made the greatest commitments to the project. It consists of a Leadership Group, Steering Group, and Working Groups.

Policies

Bylaws	Commitment to Equity & Inclusion	Privacy Policy
✓ Implemented	✓ Implemented	✓ Implemented
Website 7	Website 7	Website 7
Web Accessibility Statement	Governance Records	Governance Structure & Processes
✓ Implemented	✓ Implemented	✓ Implemented
Applies to Solution	Website 7	Website 7
Transparent Pricing and Cost Expectations		
✓ Implemented		
Website 7		
	11111	11/1



Compare solutions

57 solutions (and growing)

Compare Solutions

Mukurtu CMS	DSpace
Center for Digital Scholarship and Curation	Lyrasis
United States	• United States of America
Mukurtu (MOOK-oo-too) is a content management system and access platform built with Indigenous communities to manage, share, and circulate their digital heritage in culturally relevant and ethically- minded ways.	DSpace is a web application, allowing researche and scholars to publish documents and data. While DSpace shares some feature overlap with content management systems and document management systems, the DSpace repository software serves a specific need as a digital
Archive information management system	Repository software
Digital asset management system	
Learn More →	Learn More →

Technical

Maintenance Status	Actively maintained	Actively maintained
Open API	\checkmark	~
Open Data	-	✓
Open Code Repository	\checkmark	\checkmark
Technical Documentation	✓	✓
Open Product Roadmap	✓	✓



The 2024 State of Open Infrastructure Report







2024 State of Open Infrastructure

Report objectives



Illuminate patterns in funding



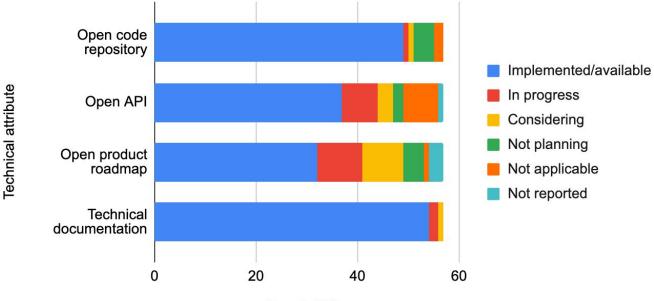




2024 State of Open Infrastructure

Invest in Open Infrastructure

Technical attributes

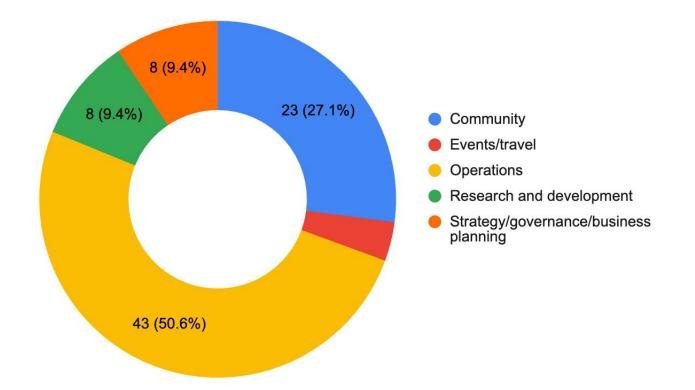


Count of Ols

2024 State of Open Infrastructure

Funding needs

Invest in Open Infrastructure



Infra Finder

Invest in Open Infrastructure

Infra Finder is created with the community

40+ User research sessions & provider conversations

Refining Infra Finder's utility, data, value, and user experience

Inspired by & built upon existing resources and work Including SComCat, POSI, HELIOS, Re3data, fairsharing.org, and more

Taking a Launch & Learn approach Use the tool and give feedback





Let's collaborate

investinopen.org/add-an-in frastructure-to-infra-finder/

Can we chat?

We're currently conducting discovery interviews to inform our future roadmap

Add your infrastructure

We're expanding and specifically interested in research software and data management and sharing solutions

Share your thoughts

Visit Infra Finder and complete our brief survey



Thank you

To support or learn more about IOI's work please contact

engagement@investinopen.org



investinopen.org @investinopen