



Invest in Open
Infrastructure

Invest in Open Infrastructure: An overview of our work in Africa

Presented by Jerry Sellanga -
Engagement Coordinator (Networks)

AfricArXiv Webinar
Presentation |
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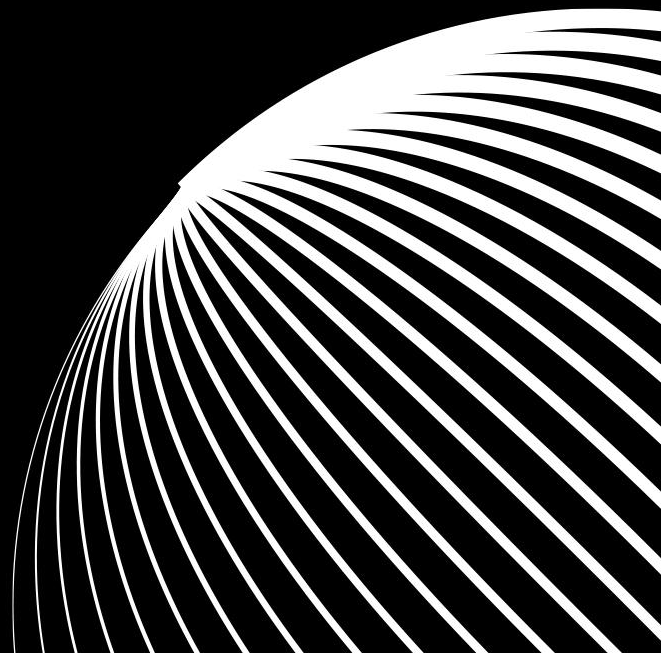
Invest in Open
Infrastructure |
investinopen.org |
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We work to increase the investment in and adoption of open infrastructure to further equitable access and participation to research.



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





What do we mean by open infrastructure?

Open infrastructure is a spectrum, rather than a binary.

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

We prioritize services that meet **one or more** of the following criteria:

- Meets the definition of [open source software \(OSS\)](#);
- Primarily or exclusively distributes openly licensed (open access) content;
- Is free to use by anyone (free of charge or other restrictions);
- Is community-governed and is transparent in its operations and finances;
- Is operated by a non-profit or non-commercial entity.

We prioritize services, projects, or tools that are designed to be widely used.

Problem

Over the past decade, we've seen heightened awareness that access to knowledge and data is critical to address global health challenges, climate change, economic development and more. Despite that shared belief, we're facing increased consolidation of tools, content, and pricing that makes participation in research cost-prohibitive.

Open infrastructure exists to provide an alternative ... but adoption is still trailing competitors.

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



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

Community-development and governance center researchers' needs.



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

Open source solutions are customizable, and able to be built on or adapted as needs grow.



Implementation and usability of open providers can be costly and time-consuming due to resource constraints.

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



Scarcity of funding and adoption can lead to unhealthy and unnecessary costs and competition.

Who we are

Data Room

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

Strategic Support

Targeted engagements to implement IOI research recommendations, further adoption of open infrastructure, and build the resilience and sustainability of the knowledge sector

Funding Pilots

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

The logo for IOI Mission, featuring the text "IOI Mission" in a bold, black, serif font. The text is centered within a yellow circle, which is itself centered within a larger, light yellow circle. The entire graphic is positioned on the right side of the slide, with a light blue arrow pointing towards it from the left.

**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 Nelson memo, G7 Communique, and EU Council guidance.

Our approach



We employ a research-driven approach

to guide strategies and action designed to increase adoption of and investment in open infrastructure.



We provide resources and analysis

to help funders and budget holders assess, evaluate, and make investment decisions about open infrastructure.



We pilot solutions and coordinate stakeholders

to increase the sustainability of the sector, to further a shared agenda for making open infrastructure the default in research

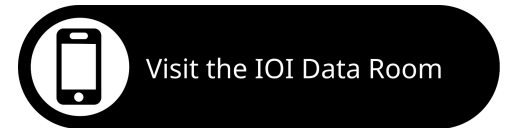
Data Room

Our data room provides data and tools that decision makers need to drive evidence-based solutions (e.g. tools, products, recommendations, and guidance) in adopting and investing in open infrastructure.

Institutions and funders can utilize data room tools to make more informed decisions about adopting and investing in open infrastructure, including actionable reports and data, and Infra Finder — our new tool for discovering and evaluating open infrastructure services.

Examples of data room resources:

1. Infra Finder
2. State of Open Infrastructure Report
 - a. Reasonable costs research





The considerations

Finding the “right” infrastructure is a hard and slow process

We discovered information related to pragmatism matters most overall.

This includes anything related to:

- **Costs**
 - How much will this cost me in labor, time, and money to install, maintain, and upgrade the infrastructure?
- **De-risking the purchase**
- **Dependencies and interoperability**
 - What else does this thing need to run?
 - Will this work with other systems installed at my org?
- **Can this infrastructure further the aim of “openness,” which includes equitable access?**



The problem

Finding the
“right”
infrastructure is a
hard and slow
process

Scattered information across various parts of infrastructure websites and fora

Different requirements and needs for different institutions and stakeholders

Time consuming to pull together comparisons to identify best options



Introducing Infra Finder

Helping you navigate the complex landscape of infrastructure services and standards enabling open research and scholarship



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.



Add your service to Infra Finder

Complete our Expression of Interest form

<https://investinopen.org/add-an-infrastructure-to-infra-finder/>



Add tool to Infra Finder



State of Open Infrastructure Report

Coming May-June 2024

Audience: Users and adopters of OI, funders, OI providers

Report Goals:

- Surface trends, patterns, issues and gaps in investment in and adoption of open infrastructure for research and scholarship, in order to identify areas that may benefit from change or intervention
- Tell success stories of OI that demonstrate/elevate its value and viability

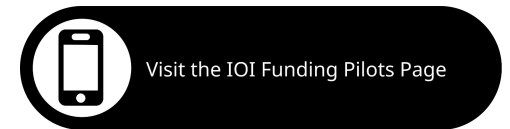
Topical brief: investigation of procurement and IT governance*

*Seeking participants in research interviews on procurement and IT governance processes

Funding Pilots

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.

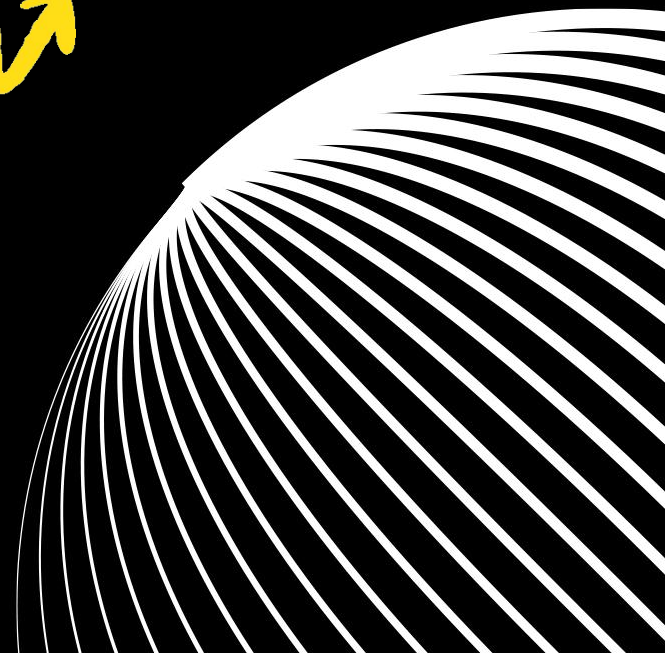
1. **Value proposition for key stakeholder group(s):**
 - a. Participating funders (commercial service providers, etc):
 - i. Increase access to open data and content and drive investment towards a more open, representative, and equitable knowledge ecosystem
 - ii. Achieve this impact at scale by catalysing new models for coordinated adoption of and shared investment in open infrastructure
 - b. Network partners (IOI Fund: Network adoption) / Grantees (OI Fund):
 - i. Receive flexible, catalytic funding to address community/members' needs in adopting open infrastructure at scale
 - ii. Co-create new models for coordinated adoption and shared investment of open infrastructure
 - c.





The Open Infrastructure Fund aims to strengthen sustainability and resilience and increase the adoption of open infrastructure that underpins research and knowledge creation.

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





What were we designing for?

Testing ways to increase...

1 Participation in funding decision making

Particularly to shift more power to those most impacted/
under-represented

2 Access to \$\$ for under-represented communities

Soliciting and processing funding applications from around the world

3 Transparency

On how \$\$ is used and decisions are made



Open Infrastructure Fund

197

Applications

55

Community
Advisory
Panellists

8

Funded
projects

51

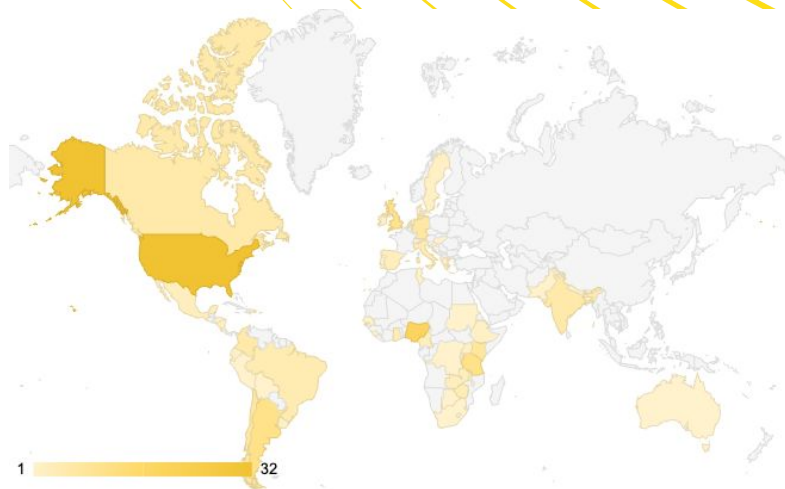
Countries
from which
applications
were
received

579

Open reviews
Submitted

69%

Total funding
to projects in
LMIEs





IOI Fund: Network Adoption

A \$6-8M USD fund to provide flexible, catalytic investment to support research communities at scale.

Is your network interested in working with us? Please get in touch!



<https://rebrandly.io/IOI-Network-Collaboration-Form>

- **Partner with at least (3) networks**, focusing on networks with a strong existing service relationship to a set of communities or institutions, a public commitment to open science principles, and a specific opportunity for using funds to develop open data infrastructure adoption among members.
- **Raise \$6-8M USD to support these partnerships for up to 3 years**, providing flexible funding and strategic support to enable the implementation of open data infrastructure for those networks and their members.
- **Create a mechanism to expand the pool of funders for open infrastructure**, including calling for commercial service providers and others who derive significant value from the open ecosystem to reinvest in the open systems from which they profit.



Strategic support

Leveraging IOI's research
to build the resilience and
knowledge base of
infrastructure providers



Visit the IOI Strategic Support Page

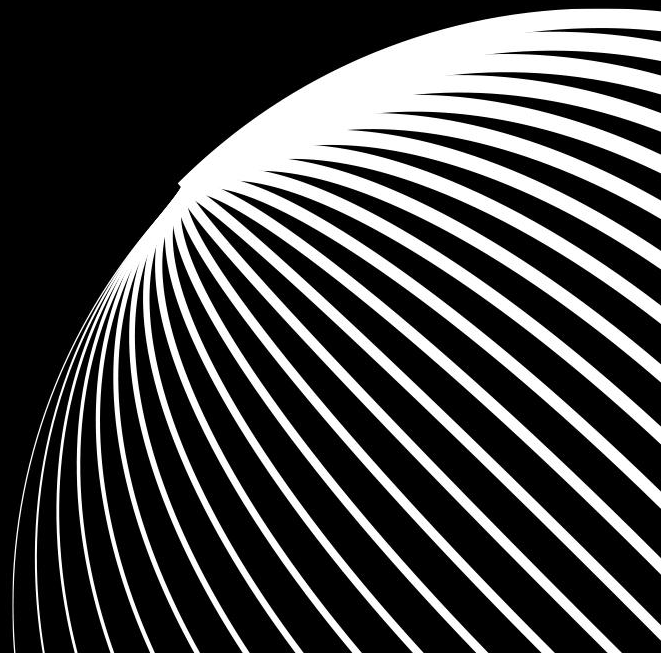
- **arXiv:** Strategic advisory services to assist arXiv in designing a robust architecture for community participation and governance structures, and expanding operational capacity and process to empower continued growth and viability.
- **bioRxiv/medRxiv:** Co-develop strategies to diversify their financial support and enhance sustainability
- **Catalyst Project:** Co-develop governance and sustainability plan for collaborative cloud infrastructure service that enables community-based cloud-native workflows in the biosciences, focussing on research communities in Latin America and Africa.



Opportunities for collaboration

Join us in advancing a healthy, resilient, and sustainable future for open infrastructure for research and scholarship.

- Participate in IOI research, tool, and pilot development
 - Add your open infrastructure in Infra Finder
 - Chat with us about your networks' needs
- Use IOI tools and research to enable open infrastructure use among network and community members
- Support IOI's work financially by joining our Sustaining Circle





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Thank you



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Get in touch via email with
Jerry Sellanga at
jerry@investinopen.org



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