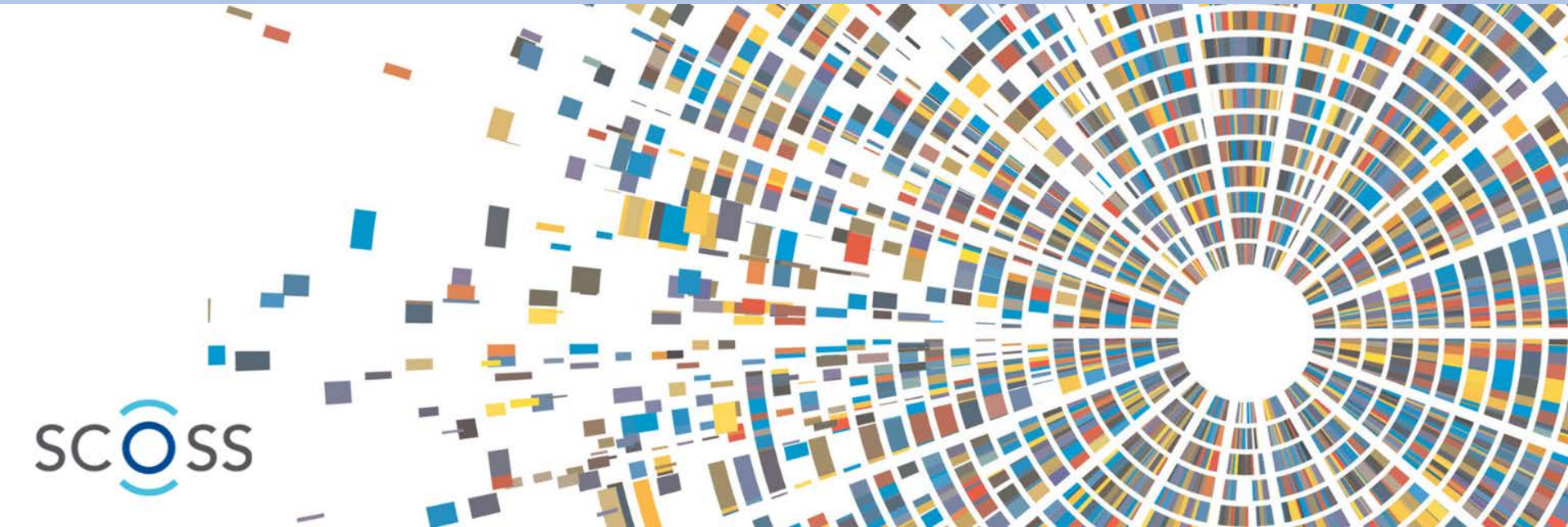
SCOSS: Global Sustainability Coalition for Open Science Services



Global Sustainability Coalition for Open Science Services (SCOSS)

Challenge:
Many open infrastructures were created using short-term project money and are no longer sustainable. OA &OS infrastructure has grown in number and usage.

Funding for operations neglected.

We want an equitable and inclusive research culture.

Risk: Services risk stagnation, downsizing or pay walling

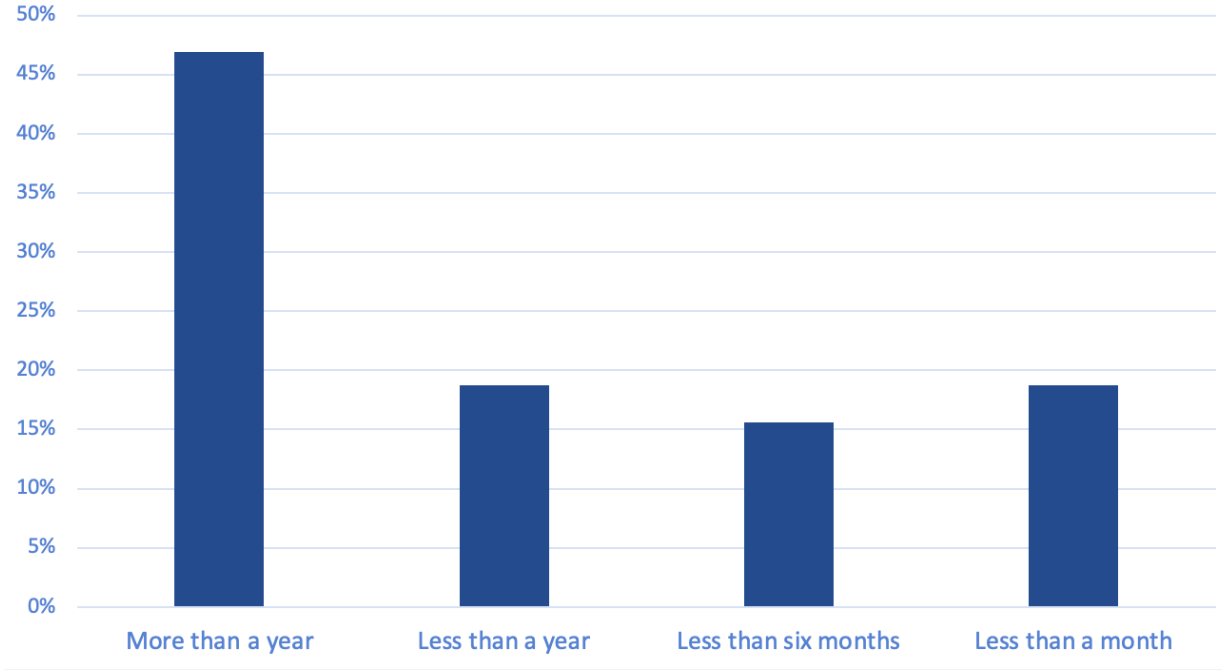
Aim: Helping sustain the infrastructure to support the implementation of OS

Officially formed in early 2017, SCOSS's purpose is to provide a new co-ordinated cost-sharing framework that will ultimately enable the broader OA and OS community to support the non-commercial services on which it depends

SCOSS

Sustainability

Without grants, how long will they be viable?



Scoping the Open Science Infrastructure Landscape in Europe. Zenodo. http://doi.org/10.5281/zenodo.4159838, p48

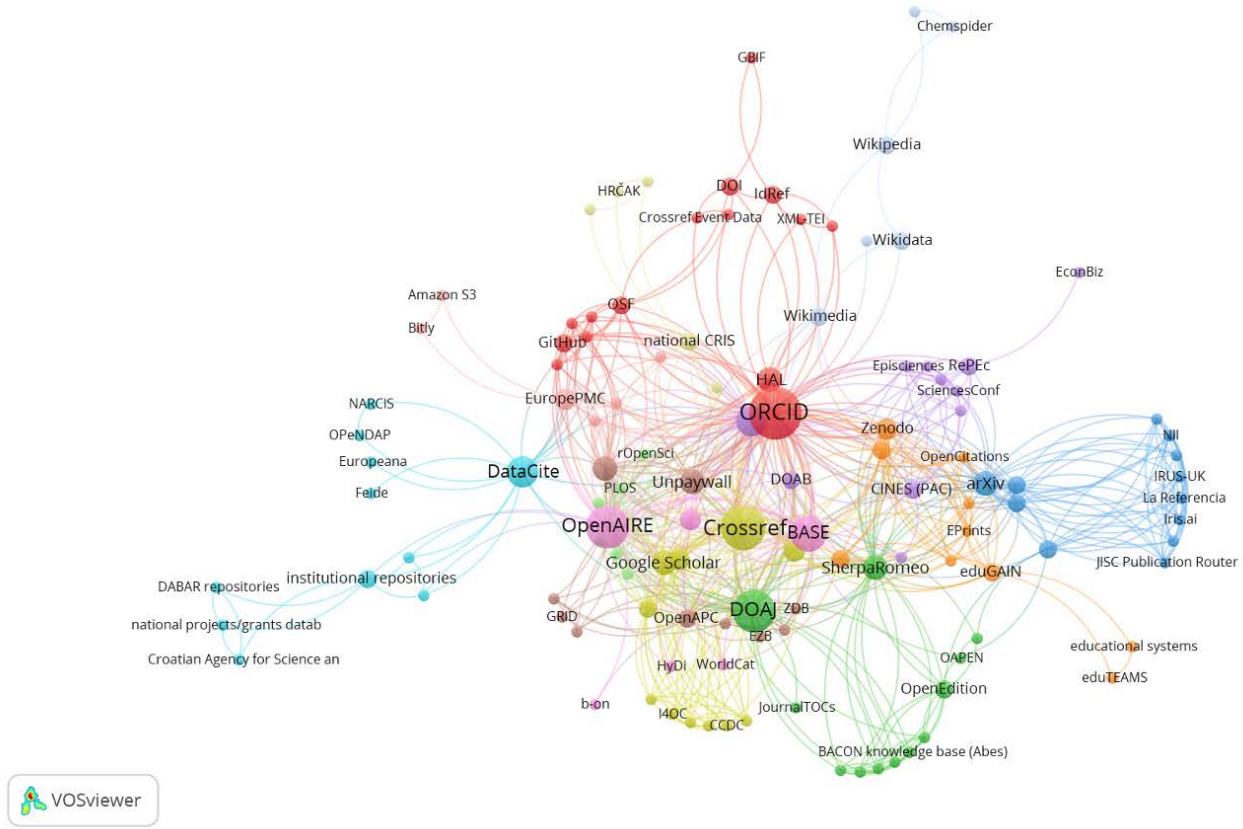
SCOSS

If we don't take concerted action...

- **Less control** over infrastructure we **helped create**; **waste**
- Our services may be **compromised**
- **Flexibility essential**: facing further lock-in
- We **lose touch** with **researchers** and with the **OS community**
- We **cannot comply** with policy / reach OA targets
- We lose our **capacity** to **influence**
- *It's more difficult to **shape our future***

SCOSS

Interdependencies



Ficarra, Victoria, Fosci, Mattia, Chiarelli, Andrea, Kramer, Bianca, & Proudman, Vanessa. (2020, October 30). Scoping the Open Science Infrastructure Landscape in Europe. Zenodo. http://doi.org/10.5281/zenodo.4159838, p32

SCOSS

SCOSS

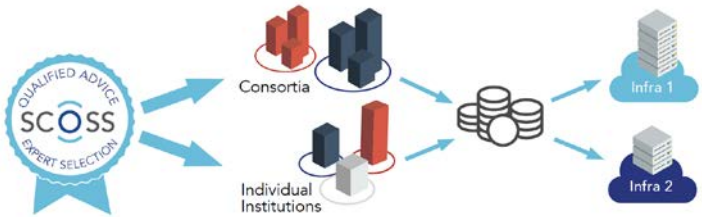
Who we are and what do we do

Community-led and governed
A consolidated voice that **vets OS not for profit infrastructure** before recommending it for funding to help **infrastructure** on **unstable footing**

- **Assess funding needs**
- **Alert funding needs** to the community
- Provide **more transparency on costs**
- **Increases efficiency** for investors
- ! Strongly encourage **good governance !**

Not a subscription or payment agency

SCOSS endorses infrastructure for investment



SCOSS

SCOSS Members

SPARC Europe

LIBER

eifl
knowledge without boundaries

CAUL
COUNCIL OF AUSTRALIAN UNIVERSITY LIBRARIANS

ASSOCIATION OF RESEARCH LIBRARIES

CARL ABRC
CANADIAN ASSOCIATION OF RESEARCH LIBRARIES
ASSOCIATION DES BIBLIOTHÈQUES DE RECHERCHE DU CANADA

Canadian Research Knowledge Network
Réseau canadien de documentation pour la recherche

Association of African Universities
Association des universités africaines

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE
MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR, DE LA RECHERCHE ET DE L'INNOVATION

مكتبة قطر الوطنية
Qatar National Library

https://scoss.org/what-is-scoss/who-is-behind-scoss
https://scoss.org/what-is-scoss/governance

SCOSS

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Governance

SCOSS Board 2022

Association of African Universities (AAU): Nodumo Dhlamini

Association of Research Libraries (ARL): Judy Ruttenberg

Canadian Association of Research Libraries (CARL): Susan Haigh

Council of the Australian University Librarians (CAUL): Martin Borchert (Chair)

EIFL: Iryna Kuchma

LIBER: Giannis Tsakonas

Ministry of Higher Education, Research and Innovation, France: Jean-Francois Lutz

Qatar National Library: Alwaleed K. Alkhaja

SPARC Europe: Vanessa Proudman

SPARC Europe: Ignasi Labastida i Juan

SPARC Europe: Marlène Delhaye

SCOSS Advisory Group

Bibliotheca Alexandrina: Mandy Taha

Canadian Research Knowledge Network: Lisa Petrachenko

CAUL: Fiona Bradley (Chair)

EIFL: Iryna Kuchma

Jisc: Liz Bal

LIBER: Paul Johnson

SPARC Europe: Jadranka Stojanovski

Swiss Library Network for Education and Research (SLiNER) and the Swiss Consortium: Lorenza Salvatori

SCOSS Office

Managed by SPARC Europe: Agata Morka, SCOSS Coordinator

SCOSS

Mission and vision

SCOSS strategy published on 17 November 2021

Mission and vision

We create connections to sustain vital Open Science Infrastructure.

A world where research is supported
by a sustainable and thriving ecosystem of Open Science Infrastructure.

Strategic goals

- **GOAL 1** - Promote the sustainability of Open Science Infrastructure through funding and support
- **GOAL 2** - Raise global awareness about the value of non-commercial Open Science Infrastructure through advocacy and connection building
- **GOAL 3** - Build and maintain trust in Open Science Infrastructure through vetting and selection

SCOSS

Progress:

Pledges and funding cycles

Over 300 institutions pledged, **24** countries

10 infrastructures selected so far

Total pledged: 4.8 million euros

Sherpa Romeo DOAJ	Pilot cycle
doab directory of open access books; open Open Access Publishing in European Networks; OpenCitations; PKP PUBLIC KNOWLEDGE PROJECT	2nd funding cycle
arXiv; redalyc.org; AmeliCA; DSPACE; SCOSS	3rd funding cycle

More information

Take things up with the infrastructure directly
https://scoss.org/help-sustain-open-infra/become-a-funder/

Or contact info@scoss.org

www.scoss.org

@scossfunding

We also have a newsletter:
https://scoss.org/newsletter/

SCOSS

COAR Confederation of Open Access Repositories

Home | News & Updates | What We Do | Resources | Events | Members | About COAR

Members

A global repository network

COAR is an international association with 155 members and partners from 51 countries, representing libraries, universities, research institutions, government funders and others.

MEET OUR MEMBERS

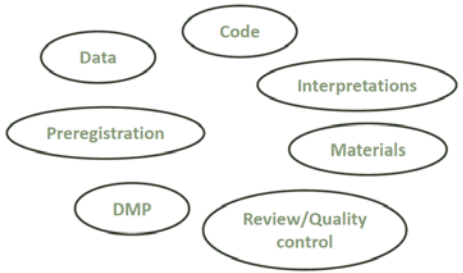
The Vision

Confederation of Open Access Repositories

A **global knowledge commons** based on an interoperable network of open access repositories

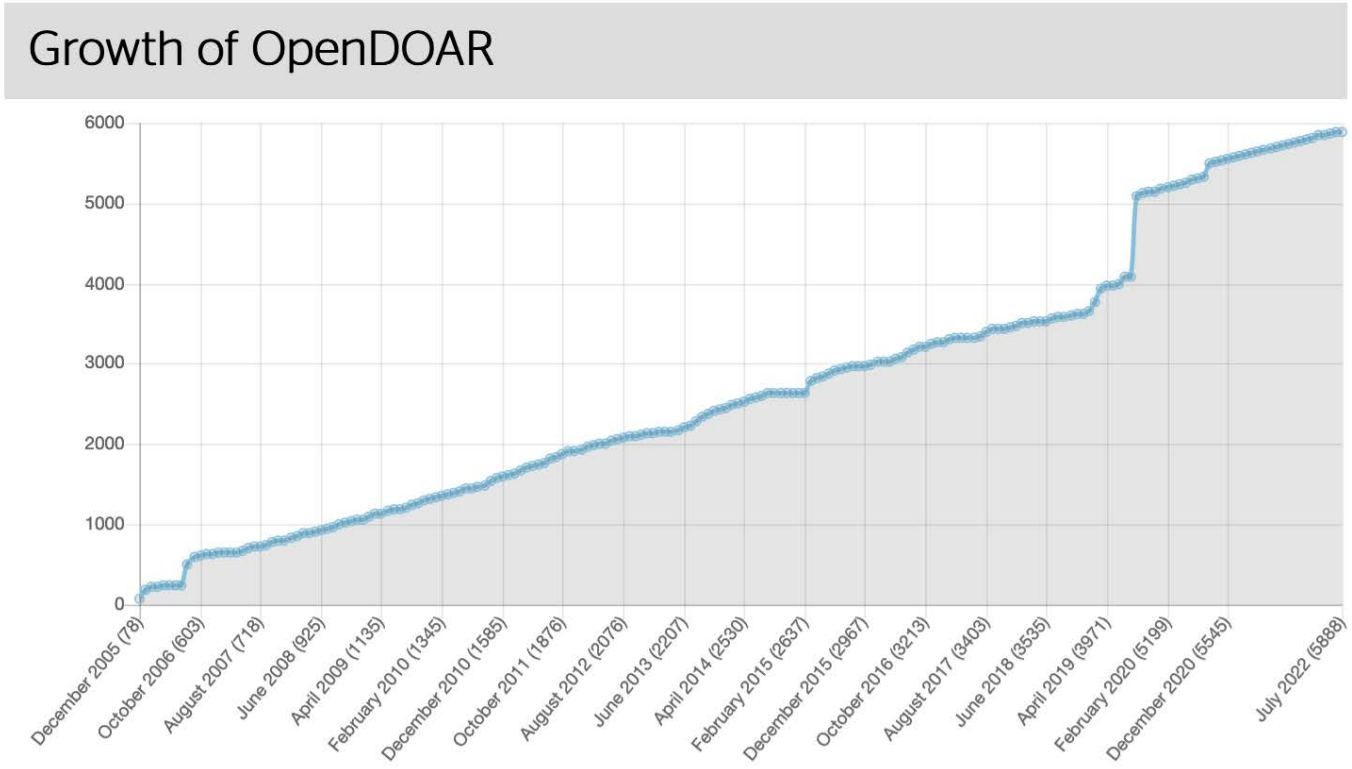
A system of interoperable digital research objects

- Dynamic, version controlled
- Can be searched and text-mined
- Near-immediate publication
- Different models for post-publication review exist
- Contributorship in diverse roles
- Open to everyone



(Bjoern Brembs, neurobiologist - COAR Annual Meeting 2022)

There are <u>at least</u> 6000 open science repositories around the world



COAR
Confederation of Open Access Repositories

Distributed 

Centralized 

COAR
Confederation of Open Access Repositories

Interoperable 

Integrated 

COAR
Confederation of Open Access Repositories

Open 

Closed 

COAR
Confederation of Open Access Repositories

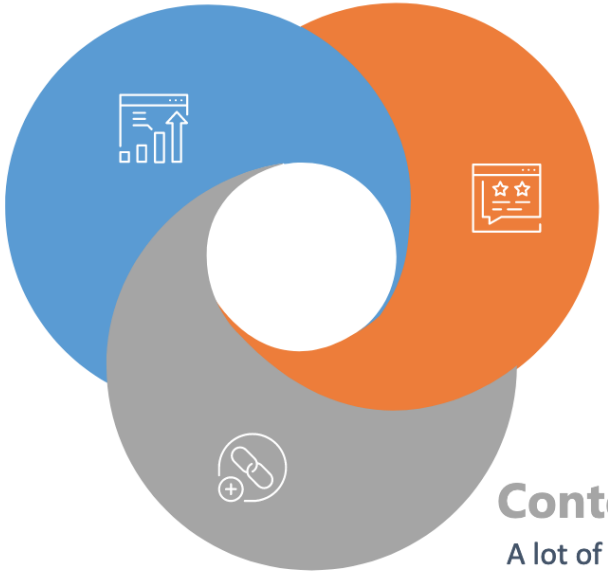
Inclusive 

Trusted 

Features of COAR community framework

Standardized

It is based on other recommendations and frameworks



Diversity

It was developed and vetted with a wide community of stakeholders including smaller repos

Content agnostic

A lot of other frameworks were developed specifically for a certain type of content (e.g. research data)

For more information from OpenAIRE interview:
Kathleen Shearer on COAR's newest community framework

COAR Community Framework for Good Practices in Repositories

Public version 1 – October 8, 2020

After extensive community consultation, Version 2 of the COAR Community Framework will be available in June 2022

Purpose

The purpose of the framework is to assist repositories to evaluate and improve their current operations based on a set of applicable and achievable good practices.

Currently, there are a number of existing frameworks and evaluation criteria that were developed to assist repositories in assessing certain facets of their operations (such as discovery, access, reuse, integrity, quality assurance, preservation, privacy, and sustainability), but these criteria are spread across different organizations and are often relevant for only one region or one type of repository.

The aim of this work was to bring together relevant criteria into a **global, multidimensional framework for assessing best practices** that can be adopted and used by different types of repositories (publication, institutional, data, etc.) and in different geographical and thematic contexts.

Process

The COAR Working Group reviewed existing frameworks, identified gaps, and assessed their level of importance, relevance and feasibility of implementation, and categorized each characteristic as either essential or desired. The framework was disseminated to COAR members in June 2020 for feedback and comments. This version is being disseminated more widely to other stakeholder communities (RDA, national repository networks, etc.) during September 2020 with the aim of having a version to publish on the COAR website in October 2020.

Languages

- English
- French
- Japanese
- Korean
- Portuguese
- Serbian
- Spanish
- Turkish
- Chinese

Essential and Desired Characteristics in 8 areas:

1. Discovery
2. Access
3. Reuse
4. Integrity and authenticity
5. Quality assurance
6. Preservation
7. Sustainability and good governance
8. Othjer

COAR launches strategy to modernize the global repository network

The trend towards open science / open scholarship is strengthening and expanding. The COVID-19 pandemic has made open scholarship a top priority for governments and the research community around the world and there is a growing recognition about the ...

July 19th, 2021 | Categories: Next Generation Repositories, Our Collective Voice, Regional Initiatives Read More

Catalyzing the Creation of a Repository Network in the US

Image courtesy of Sharon & Nikki McCutcheon, Creative Commons License COAR and SPARC have a shared vision of creating a global, open knowledge sharing system that centers diversity, equity, and inclusion, and we believe repositories play a central ...

Confederation of
Open Access Repositories

Thanks!

Kathleen Shearer, Executive Director, COAR
@KathleeShearer @COARe_V

Making open infrastructure the default in research

Kaitlin Thaney | Invest in Open Infrastructure | 7 July 2022

UNESCO Working Group on Open Science Infrastructures

@investinopen @kaythaney

About IOI

increase investment in and **adoption** of open infrastructure to further equitable **access and participation** to research

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.

Our approach

1

Research + analysis to inform, guide, reduce bias

Push and pull mechanism to increase visibility of open infrastructure services (Catalog of Open Infrastructure Services) augmented with focused research into specific areas of interest and information gaps.

2

Resources + support to further a healthier, more diverse, robust ecosystem

Research on underlying costs & externalities, transformative influence, criticality of open infrastructure and how we prioritize investment to address systemic challenges, assessment of financial health, risk.

3

Focus on funding mechanisms + recommendations to address complexity, critical needs

Research and feasibility studies with financial experts to explore targeted funding mechanisms and approaches that diversify and deepen support and long term engagement.

Points of friction

- **Time.** Invested vs available, balancing immediacy.
- **Prioritization + assessment challenges.**
  - Near term gain vs. long-term investments.
  - Who's values get applied? (Institution, Dept, budget owner, developer, consortia / society?) Which model
- **"Local first" development.**
- **Staffing & labor** to develop, maintain, sustain services.
- **Favoring usual suspects / "bigger" players.**
- **Resourcing tradeoffs/influence.**
- **Funding models that lead to burnout, resource drain**.

Increasing our understanding

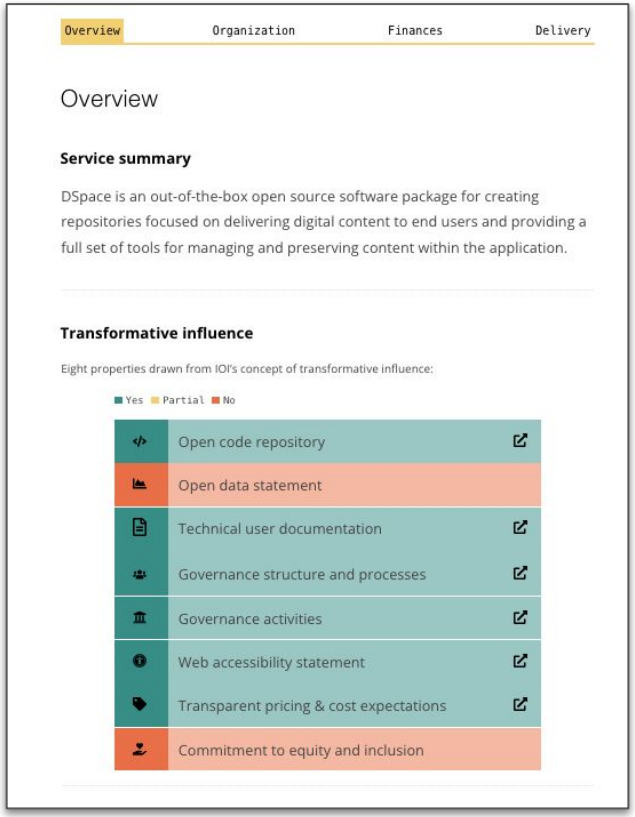
- Address information **asymmetries**
- Foster **greater understanding** of open infrastructure services
- Cultivate a deeper awareness of **how the services are provided**
- **Prototype** a means of standardizing key pieces of information
- Meet the needs of **various stakeholders** (funders, providers, and users)

Costs & characteristics of OI

Catalog of Open Infrastructure Services (COIs)

#Research #Projects

The **Catalog of Open Infrastructure Services (COIs)** is a step towards addressing the information asymmetries that exist in understanding and assessing open infrastructure projects. This effort is designed to model a means of standardizing information about core open infrastructure services for decision makers and members of the community.



https://investinopen.org/research/catalog/

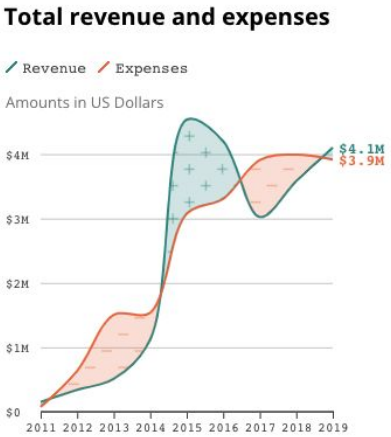
Data collection:

- Provider and funder websites
- Annual Reports
- US Internal Revenue Service Form 990 data
- Surveys and interviews with service providers
- Evidence from documented practices

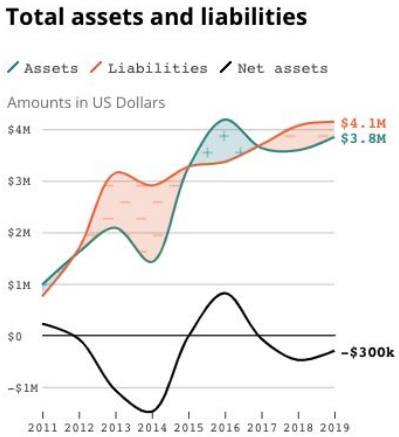
Dimension	Indicator	Evidence
Reliable technologies	Open code repository	One or multiple open code repositories must be available and accessible to the public.
Reliable technologies	Open data statement	If applicable, a statement indicating licensing and usage rights of serviced data in addition to clarifications of how user data is handled.
Reliable technologies	Technical user documentation	Technical documentation outlining not only how to use the service but also providing enough insights to fully reproduce the product.
Trustworthy organizations	Governance structure and processes	Examples include pages or content on project websites describing board structure or posted bylaws.
Trustworthy organizations	Governance activities	Examples include public summaries or minutes of board meetings (or other governance activities) in any form.
Equitable & inclusive services	Web accessibility statement	Indicators of a commitment to web accessibility standards such as a public statement or dedicated working groups.
Equitable & inclusive services	Transparent pricing & cost expectations	In addition to a transparent pricing schema potential users should be able to determine estimated costs.
Equitable & inclusive services	Commitment to equity and inclusion	Indicators of a critical and self-reflected commitment to equity and inclusion in the form of public statements or working groups. This also applies to projects with inherently equitable missions as social justice concerns many modes of discrimation and privilege as well as internal organizational practices.

Questions:

- What key information do decision makers look for to guide investment? What's missing?
- What surfaced in this work that may not be obvious to the broader community that feels important to share?
- What trends & observations do we notice? Have these been reported before? Why/why not?



Source: US IRS Form 990



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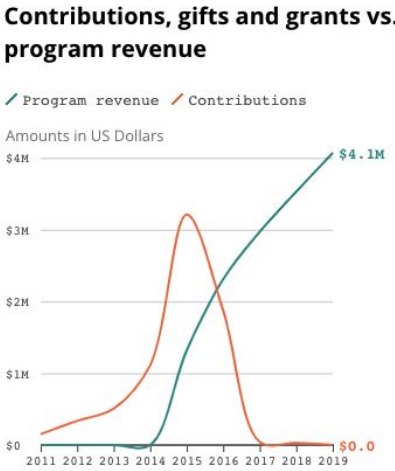
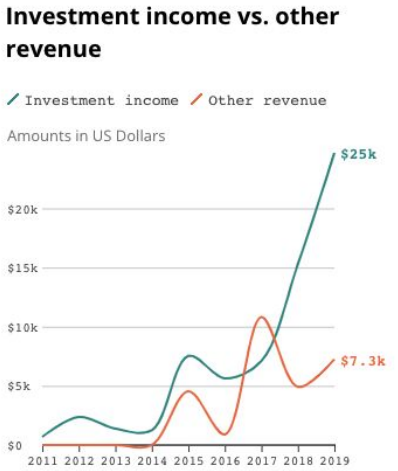


Source: US IRS Form 990

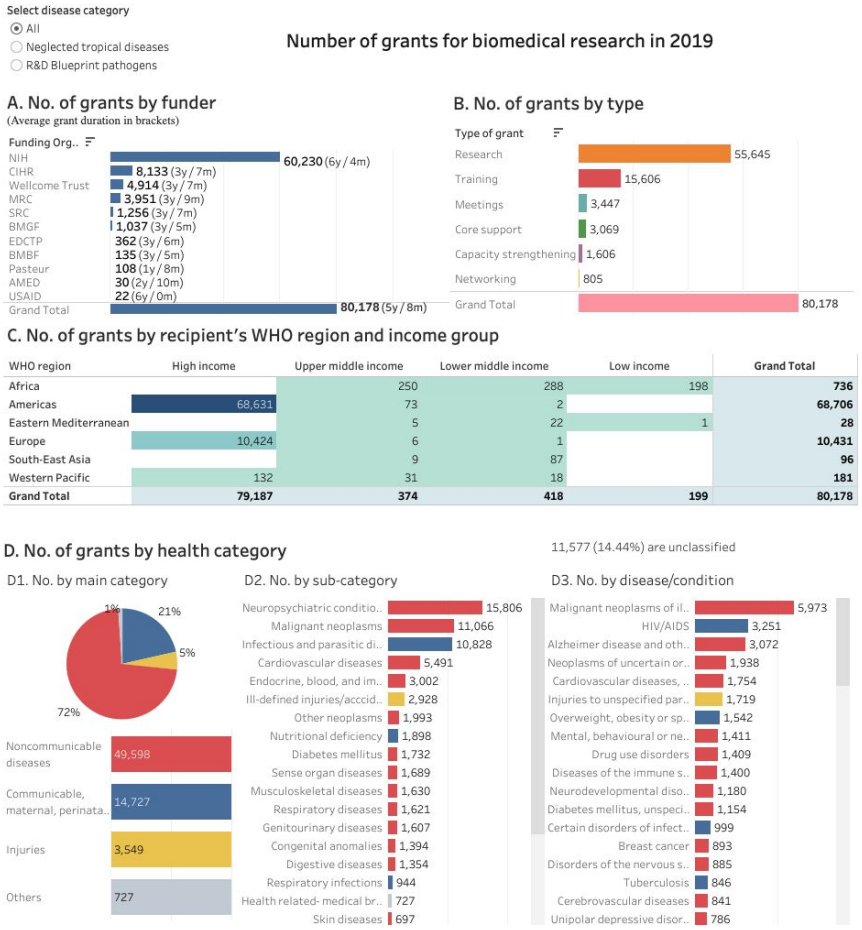


Source: US IRS Form 990

Funding trends

What we're building towards

- Where is investment currently flowing?
- What gaps and concentrations are there in support that may inform our recommendations?
- What trends & observations do we notice? Have these been reported before? Why/why not?



[WHO Global Observatory on Health Research & Development]

Funding models exploration

What we're exploring and building towards

- **Set values-aligned conditions for ongoing investment** (e.g., community ownership / non-profit status, robust governance, open code bases and commitments to open outputs)
- **Explore investment that provides additional flexibility** for projects — moving beyond "features-based development" and instead providing operational support for ongoing investment in the organizational efficacy, community engagement, as well as product development and maintenance
- **Explore mechanisms that defy traditional timelines for investment** of 3-5 years, where expectations of "providing returns" or revenue can often veer projects away from serving their communities' need, affect their ability to secure long-term viability and sustainability, and/or lead to pursue acquisition by commercial entities.
- **Catalyze and incentivize collective investment from a variety of supporters** — philanthropies, private trusts, industry, institutions, government. This includes exploring reciprocity models / means to incentivize contributions
- **Ways to augment and build on / with others in the space**, ensuring we're coordinating and learning with others with expertise and programs working to advance shared aims.

Equitable access … for whom?

When we speak about the value of “shared infrastructure” the **“for whom?”** often favors the well-resourced, Western institutions and scholars.

Systemic inequities create multi-level barriers to participation, knowledge exchange, resourcing, and equitable access, countering our shared community values. What voices are missing from the discussion?

Shifting our mindset(s)

What are we working to enable?

- Frictionless exchange of content, data, software across institutions; interoperability
- Affordable and accessible tools, services, resources
- A commitment to freely and openly sharing research outputs, with minimal restriction
- Investment in open, community-owned and -led infrastructures
- Representative infrastructure and increased embeddedness/adoption, support for migration, capacity at local level, governance

“We cannot solve problems with the same thinking we used to create them.”

- Ram Dass

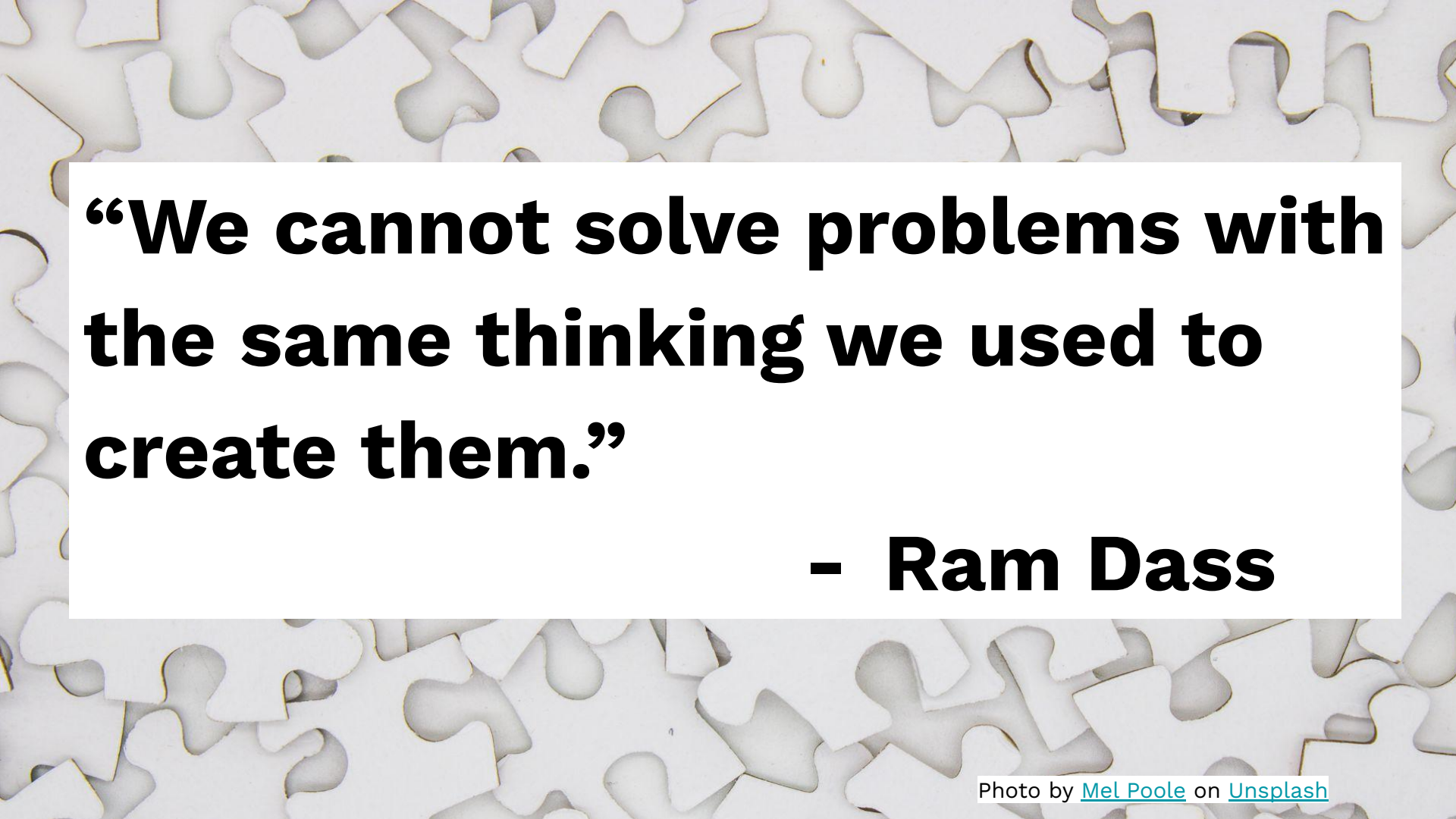


Photo by Mel Poole on Unsplash

Open research & access to knowledge requires open infrastructure.

Equitable and accessible participation in knowledge production and dissemination requires that our infrastructure is similarly designed, and anchored in community values and governance.

That means shifting reliance from players misaligned with core values of the community, transparency, and collective responsibility.

Additional resources

Access the catalog & handbook

- Rethinking our aspiration, role, and theory of change
- Beyond open: Key criteria to assess open infrastructure: More on criteria we are tracking, designed to center community, reliability, and transformative influence in our analysis.
- Exploring costs & characteristics of open infrastructure providers: Details on the projects we've selected (and how we chose them) for a deep analysis, and our broader work to map the open infrastructure project landscape.
- Funding open infrastructure: an overview of initial work: The first in a series of posts on our initial findings from collecting and analyzing data on the funding of open infrastructure.
- Funding open infrastructure: key terms and concepts in our analysis: Key terms and a general discussion of the challenges in accessing funding data.

Thank you!