
Invest In Open Infrastructure

AN INTRODUCTION TO THE GLOBAL MOVEMENT

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Outline for today's conversation:

Context: Why IOI
IOI Mission and Vision
IOI Work Underway
The Niche For Action
Open Questions and Conversation

Signs of the times

In just the last few months...

Plan S - Funders assert influence

Research Consortia break Elsevier contracts (Germany, Sweden, Univ. of California) - make knowledge open

GLOALL - Global Alliance of Open Access Platforms (UNESCO)

European Open Science Cloud (EOSC) - a cloud for research data in Europe

AmeliCA - Open Knowledge for Latin America and the Global South

The scholarly infrastructure context

Commercial acquisitions of key infrastructure

Question of control/ownership of scholarly infrastructure in the spotlight

Increasing control of the knowledge production circuit: from content licensing to preprints, analytics, workflow, and decision-support companies

Restrictions on the rise:

restrictions on where, when or how to deposit

Platforms, tools & systems critical to the full research lifecycle are increasingly **vulnerable** to exclusive commercial provision

Numerous **“siloed” projects** that may or may not work with each other, with inconsistent funding, function, goals....

The scholarly infrastructure context

Significant gaps in understanding:

Who are the **players**? What are their **motivations**?

Whose **interests** are being served, and what is left out?

What does the **landscape** look like now, and what have we created?

Which landscape do we want for our **next-generation scientific communication system**?

How much does it **cost**, and how much should it **cost**?

The risk of inaction

Who controls knowledge? What is saved?

Who gets to see what, and on what terms? Who decides?

Imbalance between academy-owned and commercial infrastructure
(Privatization of Public knowledge)

Siloed behavior in a networked, interdependent world
(Loss of national / international competitiveness)

Increasing waste and redundancy
(Loss of resources & credibility)

Inability to serve as effective stewards of the scholarly & cultural record
(Loss of relevance, integrity & trust in our knowledge institutions)

Answering the call to action

Open, Community-controlled Infrastructure to Support
Open Access to Knowledge in the Public Interest

There are many **examples of working efforts** to point to & learn from

We have an **opportunity to rethink** community investing strategies -
Funding agencies & institutions are looking beyond one-offs

There is a **narrow window** to construct & support
a comprehensive framework for **collective action**
to impact the broader ecosystem **at global scale**

IOI's Beginnings

In April of 2018,
a host of international non-profit organizations
interested/involved in providing open source infrastructure,
tools and services to support open,
community-controlled scholarly infrastructure
self-organized to develop a
“Joint Roadmap for Open Science Tools” (JROST).

IOI's Beginnings

The initial effort focused on **facilitating technical collaboration and interoperability** across projects, a subset of the group began to meet regularly to explore constructing a large-scale, collaborative, **global funding model** to support and sustain this infrastructure.

The result is **“Invest in Open” (IOI)**.

IOI: Who are we?

We are an **international group of organizations**,
coalitions, and like-minded efforts that **share mutual goals** and in
most cases have already been working towards similar objectives.
We are **coming together under IOI** to coordinate and align our efforts



Strategy — Collective Action at Scale

A different model, based in different thinking

- **Embracing a global consciousness:**
A structured “network of communities and alliances”
(Align towards interdependence)
- **Enabling a coherence approach:**
Structural elements to ensure interoperability & integration
(Relate the parts to the whole)
- **Enacting sustainable fiscal stewardship:**
Reinvesting & being responsible with limited resources
(Pool the risk & manage investment)

IOI - Desired Future State

- Coherent, **end-to-end, open, community controlled infrastructure** to support the full life cycle of science and scholarship
- Sufficient funding to **support the evolution, maintenance, operation and support** of this infrastructure
- Sufficient funding to **support the innovation** required for new infrastructure as needs and technologies change
- **Funding from a mix or sources**, including scholarly and research institutions (through libraries, research offices, and other budgets), government agencies, and private foundations

IOI's Two Functions

Assess and Recommend

Provide a Framework to regularly survey the landscape of open scholarly infrastructure with respect to its functionality, usage, health and financial needs and make funding recommendations for that infrastructure

Coordinate Funds

Following the recommendations of the Framework, coordinate financial resources from institutions, agencies and foundations, to increase the overall amount and impact of funding available to emerging and critical infrastructure

IOI - What we're doing

- Formation Process: governance, funding, staffing, etc
- Research
 - Census (Mapping, JROST)
 - Library Survey (Mapping)
- Seeking input, forming connections, and building relationships with existing global infrastructure initiatives and projects

Research Underway

1. **Census of Scholarly Communication Infrastructure**

Purpose: to map the range of infrastructure that comprises the system of scholarly communication (*Launched Feb 2019*)

2. **Survey of Library Investments in Scholarly Communication Infrastructure**

Purpose: Survey of colleges and universities to understand their current investment practices in this infrastructure (*Launching June 2019*)

Principal Investigators: Mike Roy, David W. Lewis

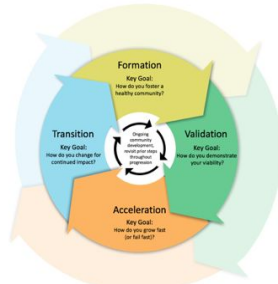
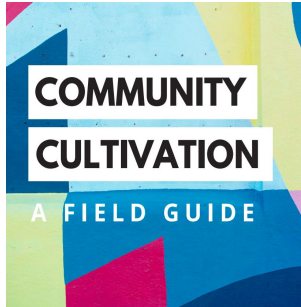
Consultants: Educopia Institute, TrueBearing Consulting

Generously funded by: The Andrew W. Mellon Foundation

What the Census Can Tell Us

1. What have we created, and what does the **landscape look like today?**
2. **How are initiatives supported** and how stable is that support?
3. What are the greatest **risks** to the infrastructures we are supporting?
4. How can we **improve the ways we build and fund tools** and services?
5. Can we responsibly use this type of information to **guide investments?**

Foundation for the Census



CCFG Purpose: To help communities assess their current strengths and growth opps, then pinpoint appropriate tools and activities to assist in their maturation.

Census Purpose: To gather and assess info about the SCR's organizational, technical, fiscal, administrative, governance, engagement, and HR/staffing activities in order to better understand individual SCR stability *and* to establish a health index for SCRs via the aggregated data.

Community Cultivation Field Guide available at:
<http://educopia.org/cultivation> (free and open)

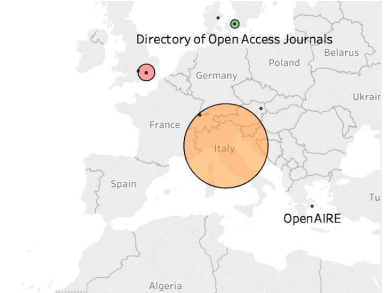
	Formation How do you foster a healthy community?	Validation How do you demonstrate your viability?	Acceleration How do you grow fast (or fail fast)?	Transition What structure(s) do you need for continued impact?
Vision	establish & document mission, vision, values with community leadership; set initial goals (1-3 yr); pilot services/products	externally articulate mission, vision, values; test, evaluate, & improve services/products; conduct SWOT, market analysis; establish brand	build strategic plan & evaluation measures; demonstrate ROI & impact; monitor landscape; scale up services/products	revisit mission, vision, values; identify service/product gaps & challenges; consider landscape changes and opportunities
Infrastructure	establish communications & administrative structure; document current dependencies (e.g., host organization(s), service providers) and exit strategies	refine communications & administrative structures; create communications plan; explore relationship management (CRM) and digital preservation tools	implement communications plan; streamline member onboarding; add relationship management & digital preservation tools and strategies	evaluate platforms and operations; establish new communications & administrative support as necessary for transition(s)
Finances and HR	establish administrative costs; evaluate HR needs; create financial plan; document fiscal milestones	test financial plan; build accounting framework, COA, and manuals; establish financial reserves; ensure HR structure supports staff and complies with laws	diversify funding streams; cover operational costs + 10% (reserves); fundraise for reserves as necessary; evaluate growth/scaling	analyze income/expenses; explore available/needed resources to support change; consider endowment-building activities; evaluate/adjust HR infrastructure
Engagement	foster relationships; establish subgroups & regular meeting schedules; document who is engaged	give credit/awards to community members for engagement; formalize committee rules & processes; engage strategic affiliates; begin regular reporting to community	broadcast services & products through community members and affiliates; effectively engage new members/affiliates; exercise the community's voice within the broader field	maintain transparency about changes; identify & pursue key relationships in support of the transition(s); survey/interview members and strategic affiliates to help identify new directions
Governance	establish/grow community leadership; document governance procedures; establish member MOUs/contracts if needed	formalize leadership group, name leadership roles and create descriptions; refine and formalize governance procedures	spin up leadership subcommittees as needed; cultivate next generation leaders	evaluate governance policies and procedures and revise as necessary; if significant changes are needed, maintain openness about them

Census — Early Data Visualizations

Complete the census for your Scholarly Communication Resource:

<https://investinopen.org/census/>

- Census opened Feb 18-Mar 22 by invitation
- 45 respondents
- 25+ additional respondents have indicated interest and will be included late
- Reopened May 13 at launch of IOI; link on website

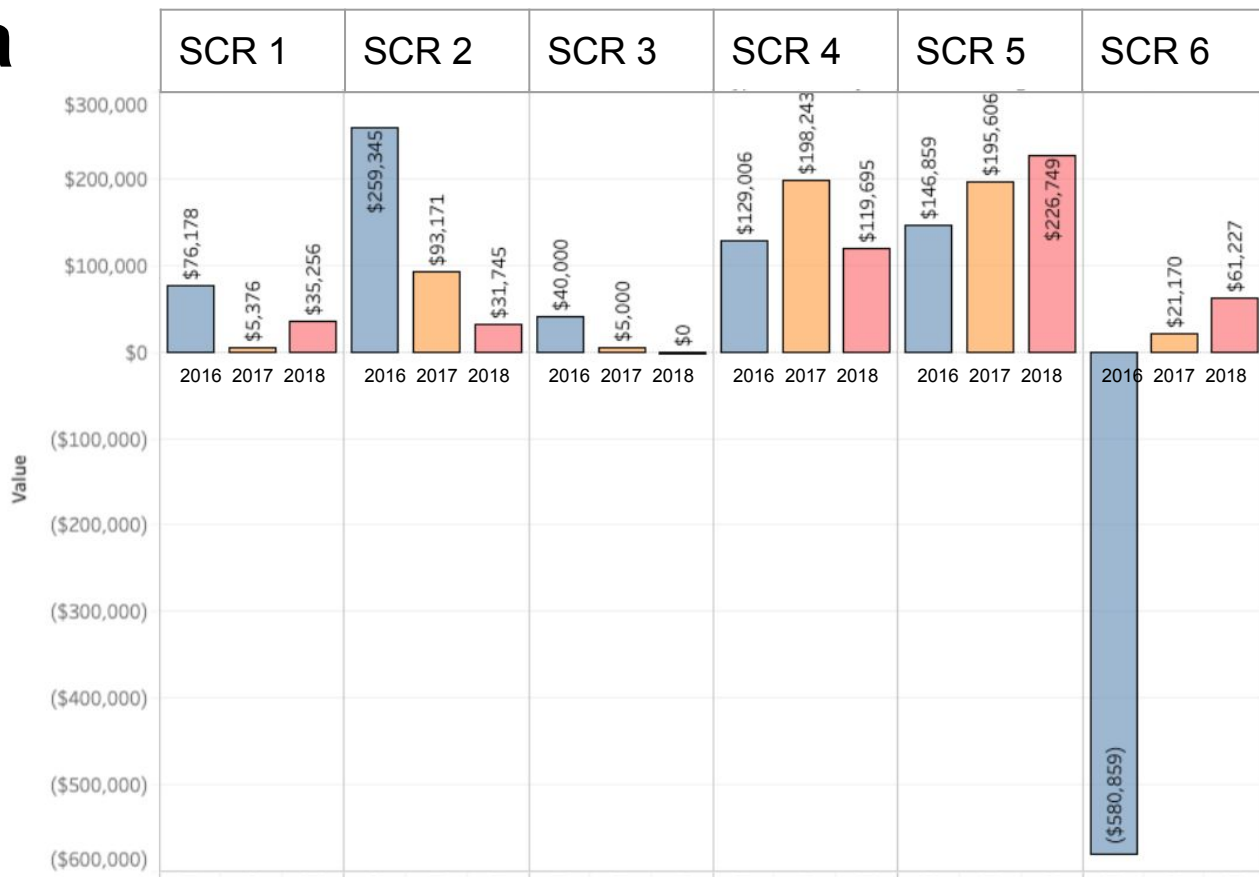


	Creation - Data gathering	Creation - Data analysis	Creation - Experimentation	Creation - Computation	Publishing - Submission	Publishing - Review	Publishing - Copyediting	Publishing - Design	Publishing - Layout	Hosting/access - Data ser..	Hosting/access - Journal hosting	Hosting/access - Monogra..	Hosting/access - Preprint service	Discovery - Persistent ide..	Discovery - Identity	Discovery - Citation	Discovery - Aggregating/indexing	Discovery - Search	Evaluation/comment-Rev..	Evaluation/comment-Ann..	Evaluation/comment-User analytics	Archiving/preservation - C..	Archiving/preservation - Replication
SCR 1																							
SCR 2																							
SCR 3																							
SCR 4																							
SCR 5																							
SCR 6																							
SCR 7																							
SCR 8																							
SCR 9																							

Example Data

This graph shows fiscal variance between net budgeted and net actual for six of the surveyed SCR's.

In mature SCR's, we would hope to see relatively stable, near zero amounts--not at all what we see here.

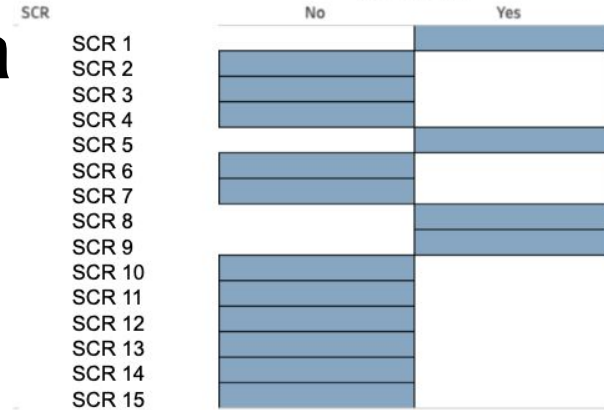


Administrative - Succession Plan

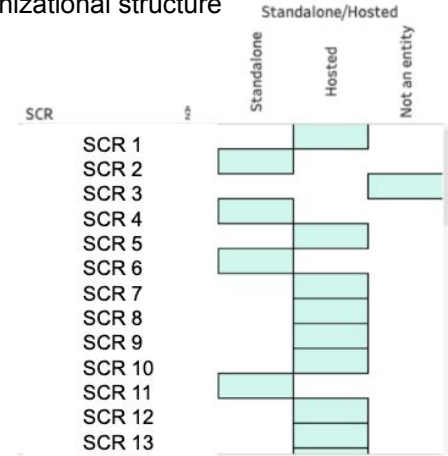
Example Data

This graph shows organizational and administrative info reported by 15 SCRs.

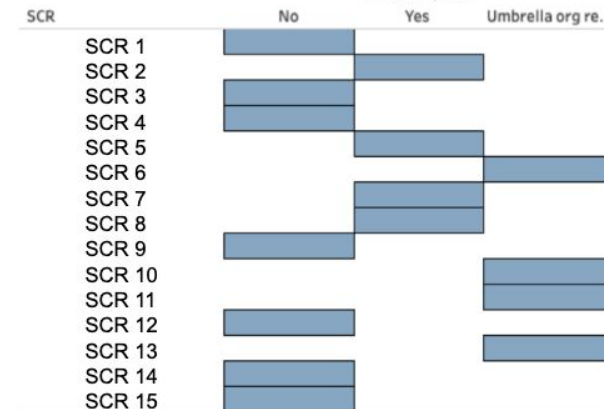
Questions probed organizational, technical, fiscal, administrative, governance, engagement, and HR/staffing activities



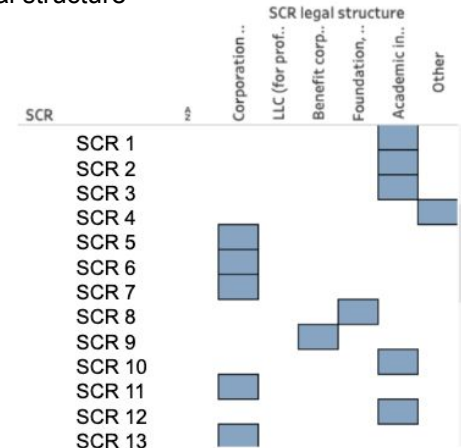
Organizational structure



Administrative - Annual Report



Legal structure



Survey of Library Investments in Scholarly Communication Infrastructure

The goal is to establish across a range of different **types of libraries the investments** they make in scholarly communications infrastructure.

Libraries will be asked to provide:

1. Demographic information, budget, etc.
2. Investments (dollars and people) in various SCRs
3. Expectations of future investments

Will show level of library investment and where it goes.

The Next Six Months

1. Developing and implementing a **governance model** to support action on global open infrastructure with **transparent processes**
2. **Engaging community feedback** - request for comments from and invite others to join.
3. Developing **global representation** on the leadership/committee
4. Engaging with funders and stakeholders to **build a robust strategy** that supports open infrastructure long term
5. Engaging a planning grant to **hire staff and develop strategy** of this group, focused on open infrastructure

Question and Things We Should Know

What resonates?

What's missing?

What would you want to see?

What concerns you?

Contact us: info@investinopen.org

Website: <https://investinopen.org>