Towards Interoperable and Equitable Scholarly Communications Ecosystems: Values-based Questions to Ask Infrastructure Providers

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UC San Diego Library

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The brief

• Describe, share, and get input on a pair of workshopped tools that are:
  ○ intended to raise awareness of an issue among campus stakeholders.
  ○ guide campus stakeholders to make more intentional, values-based, and economical infrastructure decisions

• What is the issue?
• Background to the project
• The tools
The issue-commodification

“The current scholarly communication landscape is populated by a variety of actors and powered by an ever-increasing array of complementary and competitive systems for the production, publication, and distribution of scholarship.”


Actors [Stakeholders]: Operating in silos and unaware of the connections across the ecosystem

Landscape [ecosystem]: Includes all of the products and processes that result in tenure and promotion or winning grant funding
The background

- Scholarly communication ecosystem has become a battleground
- The big infrastructure providers are intent on owning the entire ecosystem
- Conversations and actions are mostly concentrated on values statements or publishing negotiations
- How do we make principles and statements actionable? How can we help our institutions benefit more and buy-back less?
Meanwhile at UC San Diego

'Balletje balletje' Parijs on flickr https://flic.kr/p/Qkpvf9 CC-BY 2.0
Fundamental Truth: If we do not create the open scholarly commons, Elsevier, Springer, Wiley, et. al. **will own the scholarly record and continue to exploit the academy**. What should be a public good will be used for private gain.

- David Lewis and Mike Roy
“Let me make it clear that we are not EVER going to take our hands off the content,”
- Youngsuk ‘YS’ Chi
Chairman, Elsevier
Our humble project - how can we begin to address all of these issues in a community?
2017:
UC San Diego environmental scan

FSCI’18:
Building an Open and Information-Rich Institution
- Allegra Swift and David Minor

Happened the same week!
AM5 Building an Open, Fair and Sustainable Information-Rich Research Institution

Course Chairs: Allegra Swift, MLIS, Scholarly Communications Librarian, UC San Diego; David Minor, MLIS, Director, Research Data Curation Program, UC San Diego Library

Instructor: Allegra Swift; David Minor; Charlotte Roh, Scholarly Communication Librarian at the University of San Francisco; Rebecca Bryant, Senior Program Officer, OCLC; Dublin, OH; Anita De Waard. Research data management at Elsevier; Simon Porter. Digital Science, London

Using the Force(11) for Good – FSCI’18

• Multi-institutional (mostly librarians)
• Brought in speakers (trouble finding academic/open source)
  • Guided work through two tools
  • Infrastructure checklist
• Visualization
Two teams, two tools:
- Infrastructure checklist
- Visualization

The teams:

★ Elena Feinstein - Duke University
★ Emily Frank - Louisiana State University
★ Vanessa Gabler - University of Pittsburgh
★ Robyn Hall - MacEwan University
★ Claudia Holland - Mississippi State University
★ Allison Langham-Putrow - University of Minnesota
★ David Minor - University of California, San Diego
★ Charlotte Roh - University of San Francisco
★ Allegra Swift - University of California, San Diego
What we wanted to do

Approach the issue with a values-based intention

Approach the issue holistically addressing the ecosystem

Approach the issue with the bigger picture in mind, reach the multiple stakeholders on our campuses

Create practical simple tools that can actually be used

Answer the question, “I get it, now what do I do?”
Infrastructure checklist
Of Vendors & Values

By: Emma Molls
June 26, 2018

Background

University of Minnesota Libraries evaluated publishing platforms twice in recent years. The first time, in 2014, was an initial content creation infrastructure evaluation that coincided with the development of the Libraries’ Publishing Services program. The 2014 evaluation resulted in the selection of bepress Digital Commons and used a straight-forward, though robust, evaluation matrix. Platforms were ranked on a 0-5 scale by each member of the Evaluation Team across 6 categories: software details, costs, public facing features, display customization, editorial backend, and additional services provided. Each of the categories were weighted based on use of software, value, and efficiency. A final report, summarizing results of the matrix, was drafted and submitted to a steering committee. Recommendations followed the Libraries’ standard decision making routes, and software was selected.

https://doi.org/10.6084/m9.figshare.7416278.v1
Institutional self reflection, to expose values

Values-based questions to ask the vendor
The Checklist: please adapt and use!

https://doi.org/10.6084/m9.figshare.7406849.v1

goo.gl/VewvdB
Creating an Alternative

- In what circumstances should the university (or a consortium) consider creating an alternative to a commercial product? When is it feasible to do so?
- What would the process be for determining whether and how to commit resources to an initiative to explore creation of a competitor product? For an example, look at how universities partnered to form the Public Knowledge Project, which launched Open Journal Systems.
- Related to the former question, would you be able to participate without a proof of concept? Consider your institution’s willingness and ability to be an innovator versus early adopter.

Stakeholder Participation

Does a formal campus group need to be convened to evaluate and offer guidance on the current need? In the event this is a long-term commitment, what roles might its members be willing to play (in terms of governance, code contributions, financial contributions, etc.) to ensure...
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Stakeholder Participation

Does a formal campus group need to be convened to evaluate and offer guidance on the current need? In the event this is a long-term commitment, what roles might its members be willing to play (in terms of governance, code contributions, financial contributions, etc.) to ensure the long-term sustainability of platform development or purchase?

- Who needs to be a part of this group?
  - Library
  - Information technology
  - Faculty
  - University administration
  - Research office
  - Provost
  - Students

Which campus stakeholders should be involved in the evaluation of products addressing the need? We strongly encourage library representation for the reasons defined above.

- Researchers (faculty etc.)
Application at UC San Diego

**Actual Stakeholder:** new interdisciplinary faculty, tenure-track

**Valuable content:** assembling a database of assessment tools that have been developed, adapted, and/or validated in low-income settings accompanied by publications on those tools

**Values:** understands the value of open access and anticolonial practices of research production and dissemination

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**Wished-for Stakeholder:** Office of Academic Affairs

**Valuable content:** faculty data, research information generated at UCSD

**Values:** “UC San Diego will transform California and a diverse global society by educating, generating and disseminating knowledge and creative works, and engaging in public service.”

[https://plan.ucsd.edu/report/mission-vision-values/](https://plan.ucsd.edu/report/mission-vision-values/)
The Visualization
The Visualization

**PROCESS**
- Funding
- Research
- Publishing
- Teaching
- Evaluation
- Research intelligence
- Preservation
- Messaging/promotion
- Education/consultation

**STAKEHOLDERS NEEDS/DRIVERS TOOLS/SYSTEMS**

<table>
<thead>
<tr>
<th>STAKEHOLDERS</th>
<th>FUNDING</th>
<th>RESEARCH</th>
<th>PUBLISHING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACADEMIC INSTITUTION</td>
<td>researcher/faculty</td>
<td>locate and secure research funding</td>
<td>collect, store, analyze data</td>
</tr>
<tr>
<td>students</td>
<td>academic administration</td>
<td>analyze and contextualize RI data to attract funders and donors</td>
<td>determine</td>
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<tr>
<td>library</td>
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<thead>
<tr>
<th>INFRASTRUCTURE VENDORS</th>
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<tbody>
<tr>
<td>Research &amp; preparation process, Research intelligence</td>
<td>Writing process, Research intelligence, educational resources, textbooks</td>
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Lessons learned

Lack of concrete holistic academic-owned/open source/scholar-led options

Commercial dollars vs. academic

Dispersion of energy, lack of funds and ongoing communication after events

“This is new terrain for academia, but the ground is shifting rapidly. If academia can **organize its work and develop a strategic vision for research workflow**, there is yet an opportunity to avoid the negative consequences of outsourcing core scholarly infrastructure.” Roger C. Schonfeld
Questions

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References

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- Whose Infrastructure? Towards Inclusive and Collaborative Knowledge Infrastructures in Open Science
- Inequality in Knowledge Production: The Integration of Academic Infrastructure by Big Publishers
- Of Vendors & Values
- Defining RIM and the Library’s Role
- Balancing influence in a shifting scholarly communication landscape: Creating library-owned, community-aligned infrastructure through individual, local, and community action
- JLSC Board Editorial 2018
- Big Deal: Should Universities Outsource More Core Research Infrastructure?
- Workflow Lock-in: A Taxonomy
- Commons compliant tools/platform worksheet