

The open scholarship ecosystem faces collapse; it's also our best hope for a more resilient future

*The COVID-19 pandemic is significantly impacting universities and higher education institutions, reducing budgets and presenting new design challenges that will fundamentally alter how research and scholarship operate. Economic volatility is also constraining support for key systems and services that the academy relies on, especially those that are community-led. **Kaitlin Thaney** argues that there's a need to converge on community-controlled open scholarship projects, to both meet the demands of the moment, and build a more resilient system for scholarly communication for future crisis situations, and invites readers to participate in planning how such systems can be maintained.*

Those engaged in planning for the future of research and scholarship could stand to learn much from two metrics: **time to survive** and **time to recovery**. As Siddhartha Mukherjee [explains](#), these two measures of resilience (how long can your firm survive amidst a shortage, and given a particular shortage how long will it take for your firm to come back online) are integral to planning how to navigate present and future crises. At the core of this argument is the proposition that in the quest for short-term efficiency, we've sacrificed the flexibility necessary to respond to crises.

Such organisational rigidity is evident in the scholarly communications, where in general, there have been two main strategic responses to the COVID-19 crisis. Some institutions are doubling down on current service providers and vendors in the name of stability and research continuity (e.g. signing on with large for-profit publishers offering no-cost extensions). This has [decreased flexibility in a number of ways](#). Not only does pursuing this strategy drive deeper lock-in for individual institutions, it also decreases the capacity for change across the overall scholarly research ecosystem by partnering with entities that have a vested interest in squeezing out diversity and competition. This has led some to question whether such moves are really aligned with the mission of knowledge institutions, or are more indicative of a form of '[disaster capitalism](#)' and [commercial interests](#) positioning themselves to profit from a crisis.

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An alternative approach is rooted in seeing this as a moment to adapt, rethink the status quo, and build resilience by co-ordinating diverse efforts across different institutions and organisations as part of a long-term strategy. Whilst being more demanding than reaching for the comfort blanket of traditional service providers, planning in this way at least attempts to address three major changes to scholarly communication brought about by the COVID-19 crisis.

- **Openness is going to be more radically accepted (even demanded) than ever before post-crisis.**
- **Many key pieces of scholarly research landscape are at risk of going out of business or consolidating by the end of the year.** Looking ahead 12-18 months, there is a real threat of infrastructure collapse, the severity and downstream effects of which are not yet fully known at this time.
- **The current state of funding and resourcing will force institutions to do more with less and to think beyond their walls about shared models of financing.**

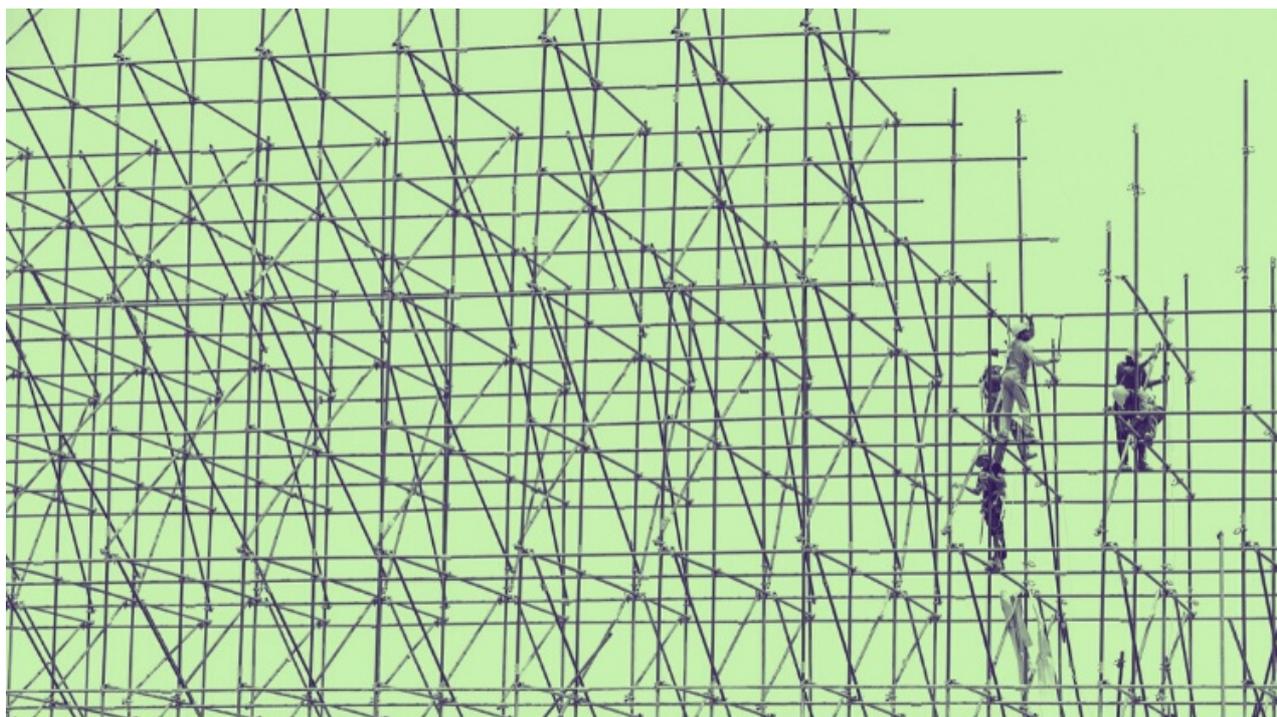
A Preparedness Model for resilient Open Scholarship

[Preparedness models](#) originate in the field of disaster management and are frameworks designed to be flexible enough to deal with resurgent and continuous states of uncertainty, for instance the potential for a second wave of COVID-19 to shut down higher education institutions for a second time. They are commonly used in disaster planning as a means to coordinate and organise action amongst individuals, organisations, and communities and [call for the following](#):

- Evaluation of existing risks and threat modelling,

- Understanding of roles of key stakeholders;
- Multi-dimensional scenario planning;
- Coordinated action on behalf of common goals to serve the broader good;
- And, a focus on building towards system resilience.

Now is the time for institutions to invest in building a “preparedness” model for higher education and research writ large, one that takes into account the economic implications for universities as well as the services and enterprises they rely on.



Risks and opportunities

Within the next year and a half it is quite possible that a number of leading structures relied on to conduct, publish and disseminate scholarly research are at risk of collapse, prominent amongst these are:

A loss in diversity amongst scholarly presses

University presses are collectively facing unprecedented deficits and sales shortfalls for print books this year. Budget constraints at the library level may well directly affect the sale of scholarly monographs, as well as subsidies and subventions. This will likely have a damaging impact on small university and library presses, scholar-led efforts and other small players that provide much of the diversity in the scholarly communication ecosystem.

The future of Scholarly and Learned Societies

Scholarly and learned societies funding primarily consists of publishing, membership, meeting revenue. Prior to the current crisis, scholarly and learned societies were under already increased pressure to pivot their business models away from a reliance on closed access publishing and meeting revenue to more sustainable ways to both serve their communities and stay financially afloat.

Scholarly societies serve important roles within their communities, and for some, scholarship for their discipline exists as conference proceedings and papers linked to annual meetings. They also work with and through their members to [articulate and support their professional values as a community and discipline](#). The necessary cancellation of in-person events poses significant risk on a number of levels for scholarly and learned societies' future, as well as for the scholarship and community development they support.

Diversity of tools and services

Over the last 15-20 years, universities have been at the vanguard of building shared open infrastructure, serving as the institutional homes of such projects as [HathiTrust](#), a not-for-profit collaborative of academic & research libraries, and investing in open platforms to support research and learning on their campuses. Yet outside of limited circumstances, these projects have proven less scalable than their commercial alternatives, which come to dominate and circumscribe certain areas of scholarship. If increasingly limited resources continue to be prioritised and allocated in this way then further consolidation is inevitable.

Co-ordinated action in the face of uncertainty

In the past few months, we've seen previous investments in digitisation and open infrastructure bear fruit. Academic libraries have been on the leading edge of digital transformation for the past two decades, as a result, they were well positioned to quickly shift research operations, collections, and teaching online in the face of a crisis. Notably, over a decade of cross-institutional investment in offerings, such as [HathiTrust](#), paid off overnight, with their ability to switch on an "[Emergency Temporary Access Service](#)" to quickly enable their 150+ members to make vast swaths of their otherwise print-only collections available digitally for their researchers. This contrasts with the more incoherent response of commercial publishers, which has arguably been more constrained and focused developing new markets within research workflows.

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The ability to quickly make decisions to benefit the academic research community was made possible by a number of institutions recognising the potential long-term benefits for a community-controlled copy of the books digitised by Google. The benefits of maintaining this diversified ecosystem have been borne out in other areas, notably the platforms that facilitate the rapid dissemination of open research, such as medical preprint servers [medRxiv](#) and [bioRxiv](#), open, rapid review services such as [Outbreak Science](#), and cross-institutional open research datasets such as the [CORD-19 dataset](#). We are currently in a moment that calls for more, not less, of this sort of upfront investment and cross-institutional planning to ensure the research community is prepared for the future.

Time to prepare

For any preparedness model to be successful, a key element is to know the strengths and capabilities of the stakeholders committed to making it a success. [Invest in Open Infrastructure](#) was created to provide support for decision makers looking to employ, support, and sustain open technology and systems that advance scholarship, research, and education. We work in concert with institutional decision makers, infrastructure providers, and funding bodies to map decision points, as well as provide evidence-based recommendations on funding and governance models available, outlining costs associated with maintaining, sustaining, and scaling open infrastructure projects.

We are currently seeking additional participants to provide insight into the realities at institutions, academic publishing outfits, scholarly and learned societies, and other supporting organisations. Interested in contributing? [Sign up here](#) or [email us for more information](#).

Note: This article gives the views of the author, and not the position of the LSE Impact Blog, nor of the London School of Economics. Please review our [comments policy](#) if you have any concerns on posting a comment below

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