



Chrysalis: Moving Forward Collectively

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Introduction

This is a critical moment for scholarly communications. Both established and fresh voices in today's still-emerging digital scholarly publishing landscape are seeking to create, disseminate, and sustain digital scholarship by experimenting with new technologies, roles, and relationships. The groundwork provided by these researchers, data managers, publishers, distributors, grant agencies and foundations, and other stakeholders will provide the foundation for next-generation scholarship and the linked data-driven Web3.0.ⁱ

Over the past year, the “Chrysalis” planning project’s research team has studied this landscape, seeking to better understand how to support and sustain the most promising of these “foundation” level first-generation digital scholarship outputs. Our journey seemed rather straightforward at its outset—we had a particular model in mindⁱⁱ, one that involved a broad range of stakeholders—scholars, publishers, and libraries. We explored the feasibility and applicability of this model in three topical areas by engaging potential participants in a series of focus groups. The focus groups provided valuable insight into model and stakeholder requirements — as documented in the white paper entitled, *Vertically Integrated Research Alliances: A Chrysalis for Digital Scholarship* (Halbert, Skinner, and Drummond, *forthcoming*). But we had an unexpected additional research finding: namely, that we were one of many grant-funded project teams that were simultaneously pursuing variations on the multi-stakeholder alliance idea. On one hand, this was good news, as our ideas clearly had merit, but on the other hand, we realized that we were pursuing a great project idea that fit a very long lineage of “one-off” approaches to what fundamentally is a system-wide problem.

As a result, we stepped back to ask how this cycle of “one-off” activities might be altered. We researched how fields and industries change over time from sociological, policy, and business perspectives. We also studied emerging approaches to addressing system-wide issues, especially those that bridged a variety of stakeholder communities. Our research raised our awareness of the Collective Impact model, which has proven success in coalescing diverse stakeholders to accomplish quantifiable change within complex ecosystems.

We gathered a group of scholarly communications thought leaders to explore the application of Collective Impact methodologies to foster system-wide changes to support digital scholarship sustainability. Two facilitators led ten scholarly communications stakeholders in a single-day pilot, using Collective Impact methods to explore consensus points around a ten-year roadmap for change.

This white paper shares our findings regarding the potential for using a Collective Impact model to achieve system-wide change within scholarly communications. It begins from the premise that the academic publishing ecosystem is in crisis and that collective action is needed to address this problem. It describes how fields and industries transform over time, usually in concert with a range of changes in their environmental contexts. We analyze digital publishing as an emergent field, and discuss how the collective impact model might help us to deliberately steer this field forward. Finally, we include our findings from the one-day pilot held in Washington, D.C. on December 7, 2014, demonstrating the utility of Collective Impact methodology for addressing the sustainability challenges presented by digital scholarship.

I. Our Critical Moment in Academic Publishing

Digital innovators within scholarly publishing agree that the established academic publishing ecosystem is in crisis; however, they are still minority voices in an expansive market. Traditional models of scholarly communication continue to proliferate for electronic publications, even though the apparatus of print production has arguably been in a “living dead” state for more than a decade.ⁱⁱⁱ The engrained habits and the vested interests of scholars, publishers, and librarians lead them to resist change and inhibit innovation, which in turn preserves outmoded economic models and reward structures, at least for a brief period. The scholarly communications system—like most systems—welcomes stasis and avoids the chaos of change.

Nevertheless, yesterday’s business models are beginning to lose viability in our digital world, as witnessed by the shrinking numbers and reduced outputs of university presses and scholarly societies, as well as the steady stream of mergers and buy-outs within trade publishing.^{iv} The very definition of “publishing” is in flux, especially where dissemination strategies are concerned. Large commercial publishers are paying premium rates to identify and acquire new digital communications channels, specifically those that scholars use for search and aggregation.^v

Publishers and researchers alike struggle to predict what digital content and transmission strategies will work optimally for the author and the reader both today and in the future. Determining who can and will pay for these new forms of scholarship is thus far unsolved. Economic studies of the scholarly publication system have largely remained focused on analyzing legacy publishing models and the peer reviewed “written word”, albeit now transmitted in a digital format. The costs resulting from the maintenance and upkeep of dynamic digital scholarship are in large measure simply unaccounted for in such analyses. Studies that do not foreground (or sometimes even admit) the growing prominence of data-driven dynamic scholarship leave an uncomfortable gap in our attempts to understand the future of scholarly communication.

In this moment of flux, numerous concerned stakeholders are seeking to better understand the nature of digital scholarship and how to sustain it. Surveys, reports, and publications have documented the issues and challenges impacting stakeholder groups. Yet, these studies are often created both by and for a single-stakeholder audience. A few recent efforts—including Force11, the Open Library of the Humanities, and BioOne—have broadened to encourage multi-stakeholder groups to pursue joint agendas through interdisciplinary efforts. Collaborative efforts arguably move the needle further than silo-based efforts; still the co-existence of many collaborative efforts that do not communicate with each other yields fragmentation and competition. The concept of “innovation” has trumped other valuable ideas over the initial decades of digital scholarship, including “alignment”.

Most digital scholarship efforts aim to bring about change in the academic field of practice as a component of their work. But system-wide change is not usually accomplished by through single institution-level or researcher-level efforts.

II) Field-wide Transformation

Across numerous disciplines—public policy, economics, sociology, history, and organizational psychology—researchers have studied how networks of stakeholders, activities, and circumstances surround and impact the evolution of industries. Researchers have demonstrated that fields of practice emerge and transform in concert with changes in their broader social and historical contexts, including shifts in organizational structures, struggles between key players, technological change, or changes in the systems of evaluation.

Such studies bear directly on the challenges we face as we seed models to sustain digital scholarly communication, while navigating points of friction and resistance such as those outlined above.

If we look at digital scholarly publishing as an emerging field, the following sociological findings may help us understand how best to anticipate its evolution and steer its development:

- Fields of practice—banking or medicine, academia or the railroad industry—do not organize in permanent ways. They are susceptible to and responsive to changes that happen in the broader culture.^{vi}
- When modes of communication change (e.g., the shift from print- to digital-production methods), new fields and new standard business practices emerge.^{vii}
- Established players are rarely innovators. They have too much riding on known costs and incentives, and they resist—unconsciously and consciously—changes that could cannibalize their own, known established models. Instead, it is the innovators on the fringes of a field who often have the capacity to redefine the operations of a field.^{viii}
- Single innovators do not create change—the “lone genius” concept is a fallacy. Instead, innovators are key parts of a larger cultural system of production, distribution, and reception that always depends upon networks of people. It is those networks of people that work together to legitimize and popularize an innovation. It is these networks of people that move an innovation from the fringes to the center.^{ix}
- System-wide changes occur when networks of engagement form across stakeholder groups who are united by a shared aim.^x

Field-wide transformations typically impact a number of deeply interconnected stakeholder groups. For example, in scholarly communications, these groups include authors, technologists, funders, administrators, editors, publishers, librarians, and archivists. Changes that impact only one or two of these groups are unlikely to have a deep impact on the overall scholarly communications framework. But deliberate changes made by all of these groups simultaneously are powerful, and they can transform an entire field.

A. From Coordinated Action to Collective Impact

In the social sector, the last five years have seen a rise in a very specific type of facilitated collaboration termed **collective impact**. The concept behind collective impact is that system-level change can be orchestrated through the deliberate work of stakeholders across the whole system. This does not occur just by creating a collaborative network—we already have lots of those. Collective impact is differentiated by its facilitation methodology. It begins with facilitators engaging all of the stakeholder communities around a problem area and helping them to agree upon a common vision or goal for change. This vision cannot be a platitude—it has to be an attainable goal towards which progress can be mapped and measured. The facilitation work continues at the stakeholder group level, with each group determining specific, incremental steps it may take toward system level progress, and how such progress can be mapped and measured. This stakeholder-specific work must be coordinated such that each group’s work bears an explicit, reciprocal relationship with the work of the whole collective. This work includes documenting the vested interests and economic drivers of the stakeholder

groups and the system itself as crucial components that must enable, rather than resist, alignment.

Such work occurs not within silos, but within cross-sector networks. The method cultivates trust and openness among the parties, and uses ongoing facilitated communications between the stakeholders and ongoing reaffirmations and revisions of the work as it develops in order to ensure that the developed roadmap to change is implemented. Getting the right leaders at the table to initiate collective change (Phase I) can take up to a year, while organizing and developing the roadmap itself can take two-three years (Phase II). Building from this planning, the community moves toward implementation together, usually on a ten year trajectory (Phase III). (Hanleybrown, Kania and Kramer 2012)

Active facilitation continues throughout, with a lightweight backbone organization providing the necessary connection work, both within and between each of the stakeholder groups. Progress is evaluated incrementally, and recalibration takes place as necessary. The purpose behind this methodology is to encourage every player to change simultaneously, deliberately, and in concert with each other. These changes reinforce each other at a system level, making it more likely that those changes will “stick”. In essence, the backbone organization provides the glue and facilitation necessary to keep everyone focused on a common agenda and to involve everyone in an ongoing, structured process that consistently reinforces the stakeholders’ efforts toward a common goal.

Notably, collective impact does not strive to be over-inclusive. Its function is to expose common ground where a sense of common purpose exists, and then to incentivize and organize work at the stakeholder level to move the entire system forward towards an established goal. This methodology is proving most effective when it incorporates diverse constituents that are united by a shared issue that none can solve alone.

Due to our Chrysalis planning project research, we noted that numerous multi-stakeholder initiatives are underway and in some cases, have been underway for years. In most of these cases, leadership is valued above facilitation. Or, in other words, individual voices are prioritized above collective visions. While facilitation may be a piece of the work undertaken by a multi-stakeholder group, rarely is it the crucial component of the work that carries the vision forward. Missing are the unbiased, neutral facilitators—parties that intentionally work behind the scenes and between the stakeholder groups to establish goals, facilitate evaluation, and ensure that progress is tracked throughout the work.

Could a collective impact approach help to bridge the stakeholder groups we have discussed herein—researchers, technologists, archivists, data curators, librarians, administrators, university presses, and others within the academic sector—to establish and pursue shared goals that could lead to the system-wide change in scholarly communications that is needed to meet the needs of a digital world? We believe the answer to this question may move scholarly communications beyond a continual series of one-off projects toward coordinated efforts that realize quicker, more effective change.

B. How We Might Begin

Because system-wide change requires system-wide involvement, we cannot make systematic progress by treating institution-level problems. In Collective Impact, the first step in cultivating intentional field-wide change is to bring thought-leaders and key stakeholders together to form a common vision, one towards which progress can be mapped and evaluated. Once the vision is in place, these connectors form cross-sector networks to support and advocate for needed innovations, while maintaining a strong focus on also aligning those innovations toward the shared vision. Such networks could transform scholarly communications

This “join forces” method is difficult to engineer given the way our current system functions—beginning with the way joint work is funded. Collaboration across disciplines and across institutions thus far has been supported primarily through federal and foundation funding,

which seeds small teams to work together to address specific research questions. This “let a thousand flowers bloom” approach leads to many innovative projects and approaches, almost all of which are bound by that two- or three-year funding cycle that is used to support them.

The result is that we are saturated with innovation, and most academic players have not been conditioned to question its value. This is in sharp contrast to industry, where innovation is approached more strategically and where practical concerns guide its implementation. For example, in the 1970s and early 1980s, innovations in the video market led to a video format war—VHS vs. BetaMax. Industry players dug in their heels and focused on one or the other for a brief moment—and only for a brief moment. Having multiple product types available confused the public, and most people decided to hold off on purchasing either VHS or BetaMax videos until the industry war resolved. It took only a few years for the industry to collaboratively determine that losing buyers was a system-wide problem, and that they had to consolidate practice around one technology to grow the market they all needed. VHS emerged as the victor in this case, but really, the whole market, including those that had backed BetaMax, benefitted from that move toward consolidation.

By contrast, in the academic realm, we have thousands of innovations, all vying for attention from the same “market” of scholars. Instead of yielding an environment of plenty, this has produced a sense of chaos in digital scholarship production. Standards have been slow to emerge, and without those standards, it is impossible to produce and disseminate digital publications at scale—let alone maintain or preserve them. Systems of evaluation do not deal well with chaos—and in most fields and disciplines, in part due to the instability and irregularity of digital scholarship to date, these systems of evaluation still do not recognize “digital scholarship” as rigorously re. The resulting competitive, fractured environment of digital academic publishing is hindering the scholarly communications system’s growth.

In 2014, funders—including the Institute of Museum and Library Services (IMLS) and the National Endowment for the Humanities (NEH)—began openly re-evaluating and transforming their longstanding focus on innovation. The emerging trend is toward alignment—however, several key elements are arguably missing that would reinforce and magnify the investments these and other groups are making today.

First, there is no “state of the field” report or dataset that documents the current digital academic publishing environment. Chronicling today’s activities will provide a map against which the scholarly communications system may transform strategically rather than haphazardly. Such documentation would also provide a baseline against which future progress may be measured. Today’s data visualization tools (e.g., Academic Analytics and VIVO) could enable such “state of the field” information to be mined quickly and efficiently, surfacing connections and networks and overlaps that are invisible to stakeholders embedded in the system.

Second, there is no shared sense of mission around digital scholarship, even among the stakeholders embedded within the college and university landscape. Indeed, these groups have fragmented along predictable lines, including institutional boundaries (libraries vs. university presses vs. IT vs. digital scholarship centers vs. faculty) and philosophical boundaries (open source vs. subscription). Empowering these stakeholders to see themselves as key parts of a system, not just as competitors for funding and opportunities, could have transformative power on the scholarly communications field.

There is so much stuff going on. That’s good as this is a gigantic problem. It is not a problem that is going to be solved by one group. It is too big and too diverse. You’ve got to have multiple groups out there, but those groups need to understand that there are other groups out there, and that we need to join

forces and make sure we share information to create an effective global community. – Maryann Martone, Force11

III. Leveraging Collective Impact in Scholarly Communications

Collective Impact is differentiated from other multi-stakeholder collaborative efforts by five key conditions: “a common agenda, shared measurement systems, mutually reinforcing activities, continuous communication, and the presence of a backbone organization.” (Hanleybrown, Kania, and Kramer 2012) Using this methodology, stakeholder representatives across the scholarly communications ecosystem could develop a framework (or roadmap) through which digital publishing stakeholders could in tandem address the sustainability challenges of digital scholarship.

While we don’t know if those involved formally used the collective impact model, the biomedical sciences and its NIH Data Discovery Index Consortium is the single ongoing example we have discovered of a disciplinary-centric, multi-stakeholder approach to mapping out efforts, stakeholders, vested interests and economic drivers in academic publishing. Recognizing the vast resources^{xi} behind this planning effort are not realistic for the humanities, we wonder what of this model might be adapted for other disciplinary arenas, including the social sciences and the humanities.

As a first step, on December 7th, 2014, the Chrysalis project team gathered ten leaders (Appendix A) from stakeholder communities, including scholars, publishers, technologists, librarians, and archivists. In a one-day facilitated meeting, they explored the viability of the Collective Impact model for mobilizing system-wide change in the scholarly communications ecosystem.

Facilitator preparation included a literature review; adaptation of an existing, published collective impact toolkit^{xii} to reflect the challenge of digital scholarship sustainability within the scholarly communications ecosystem; and the scripting of facilitated session prompts and interactive participant activities such as crowdstorming, conversation café rotations, and sticker polling.

Participants were asked to prepare for the meeting by familiarizing themselves with one reading on Collective Impact (Hanleybrown, Kania, and Kramer, “Channeling Change: Making Collective Impact Work”), as well as an early draft of this white paper. None of the participants had prior exposure to the Collective Impact model. Most of the participants also did not know each other at the start of the day—they represented a range of disciplines (sciences, social sciences, humanities) and segregated stakeholder fields—teaching, researching, publishing, archiving, librarianship, and funding—across which few bridges exist.

At the conclusion of the day, participants were unanimously supportive of both the style and the substance of the day. Multiple individuals noted that prior to the start, they held reservations about the approach, anticipating that it would be, “yet another meeting where we discuss the problems”. However, in their reflections, they noted that in this meeting, it felt as if they were moving forward, and actually developing a “path for action”.

The notes from the day were captured and a brief synthesis of key points is included herein as Appendix B.

IV. Conclusions

We must emphasize that this single day pilot was never intended to stand in for a full Collective Impact approach; rather, it served to test the validity and applicability of the approach within scholarly communications.

The December meeting was structured to allow us to investigate several key features of Collective Impact: developing common system change goals; establishing metrics to illustrate progress; and sustaining a “backbone” (organization or otherwise) for long-term focus and facilitation. The meeting was also designed to evaluate the responses of select thought-leaders representing key stakeholder audiences to the Collective Impact model.

Those gathered came to agreement on several important topics over the course of the day:

1. In order to make system-level progress, we need to involve stakeholders with shared interests (academic publishing and the wide dissemination of rigorously evaluated scholarship) in a coalition framework that deliberately charts progress toward establishing a healthy ecosystem for digital scholarship.
2. There is a strong need across stakeholder groups for establishing a common vocabulary for digital scholarship (including definition(s) for that term); a “mind-map” of organizations currently involved in digital scholarship; and “state-of-the-field” documentation (including a dataset that could be interrogated using visualization tools). The research team marks that these key features resemble the needs that led to the development and uptake of the ISO standard for digital preservation.
3. Not all stakeholders currently involved in digital scholarship have shared interests and drives. In particular, meeting participants marked concern about for-profit publishers due to their “predatory” practices and profit-driven motivations. Establishing ways to interact with for-profit publishers without including them in the core Collective Impact work was an ongoing topic of discussion throughout the day.
4. The “backbone” was commonly understood to be a neutral zone—one that would not have a “vote” in the coalition, but that would bear responsibility for coordinating and facilitating the group. The “backbone” should be nearly invisible; there to “glue” the participating stakeholders together, not to lead them. In other words, the “backbone” is a core that will enable the coalition to take shape and help each stakeholder group to work toward goals that help to lead to deliberate system-wide change.
5. Funding for the “backbone” function should *not* derive from foundations and federal funding agencies. Instead, initial success of this endeavor might be marked by having key stakeholders contribute small amounts of funding into a coordination backbone (to ensure consistency in facilitation across a what we expect to be a decade-long journey). Funding agencies and foundations would play a critical role in the work of the Collective Impact coalition by supporting project work by these stakeholders that directly contributes to the vision and roadmap.

The consensus of this group is that Collective Impact could provide a powerful tool and process for accomplishing the system-wide changes we believe are already underway in a more deliberate, academically focused, and efficient way. The concept that emerged from our conversations that unified these diverse voices is that we can magnify and multiply the impact of our ongoing investments of funding, energy, and infrastructure through coordination and alignment.

Notably, all meeting participants came into the day with skepticism regarding Collective Impact and its applicability to the digital scholarship ecosystem. We anticipate this same skepticism will be shared by many other key stakeholders that would need to be involved in order for this methodology to succeed. In order to build the coalition, we first need to establish buy-in from additional thought leaders.

IV. Future Efforts

The Chrysalis meeting group has indicated strong interest in working together with Educopia Institute as an advisory group to build this foundation of support through the hosting of additional one-day facilitated sessions to explore the viability and applicability of this model with other key stakeholders. These sessions would be hosted in conjunction with existing meetings where possible over the course of 2015-2016. Ideally, these sessions would be facilitated by a common core of facilitators, including one Educopia representative and one project advisor, in consultation with one experienced facilitator who has conducted similar work in other sectors (e.g., FSG Social Impact Consultants).

The success of this planning effort would be marked by involving these additional thought leaders and “connectors” in the creation of a core coalition by July 2016 that involves key stakeholders from each of the relevant sectors of activity (including faculty, researchers, university presses, libraries, archives, IT departments, digital scholarship centers, higher education administrators, and higher education meta-organizations such as AAU and APLU). These stakeholders would work together to provide seed funding for a neutral backbone position(s) (location currently undecided) to bind together the efforts of the coalition over a 10-year project period.

Over 2015-2016, Educopia and the advisory board would also undertake “state of the field” research to establish a dataset and a publication that describes the current ecosystem of digital scholarship and that highlights opportunities. These would provide the basis for the 2016 Coalition kick-off—providing solid data that can serve as a baseline for benchmarking, and that can point to overlaps and opportunities in the system that deserve attention.

Beginning in July 2016, the Coalition would use Collective Impact methodology to establish 1) a common vision, 2) metrics to evaluate progress toward that vision, and 3) a plan of action that includes regular meetings of the Coalition to maintain connections, provide an accountability apparatus, and to encourage recalibration as needed across the 10 year journey.

ⁱ For more information on the development of Web 3.0, see <http://www.w3.org/2013/data/>

ⁱⁱ Vertically Integrated Research Alliances (VIRAs)

ⁱⁱⁱ Kathleen Fitzpatrick, *Planned Obsolescence*.

^{iv} Mary Munroe, *The Academic Publishing Industry: A Story of Merger and Acquisition* (unpublished manuscript), available at <http://www.niulib.niu.edu/publishers>; more recent mergers include the infamous Random House/Penguin merger in July 2013, among others.

^v For example, the often cited 2013 Elsevier purchase of Mendelay.

^{vi} See e.g., DiMaggio, P. 1982. ‘Cultural entrepreneurship in nineteenth-century Boston, Parts I and II Media, *Culture and Society* 4, pp. 33-50, 303-20; DiMaggio, P. 1987. ‘Classification in art’ *American Sociological Review*, 52, pp. 440-55; Dowd, T. J. 2003. ‘Structural power and the construction of markets: The case of rhythm and blues’ *Comparative Social Research* 21, pp. 147-201; and Dowd, T. J. 2004. ‘Concentration and diversity revisited: Production logics and the U.S. mainstream recording market, 1940-1990’ *Social Forces*, 82, pp. 1413-55.

^{vii} Ibid. See also Bourdieu, Pierre. *Distinction: A Social Critique of the Judgment of Taste*. Translated by Richard Nice. Cambridge, MA: Harvard University Press, 1987.

^{viii} See e.g., Allen, M.P. and Lincoln, Anne E. “Critical Discourse and the Cultural Consecration of American Films.” *Social Forces* 82, no. 3, (2004): 871-93; Dowd, T. J. 2003. ‘Structural power and the construction of markets: The case of rhythm and blues’ *Comparative Social Research* 21, pp. 147-201

^{ix} Becker, Howard. *Art Worlds*. Berkeley, CA: University of California Press, 1984.

^x Levine, L. 1988. *Highbrow/Lowbrow: The Emergence of Cultural Hierarchy in America* (Cambridge, MA); DiMaggio, P. 1982.

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DiMaggio, P. 1987. 'Classification in art' *American Sociological Review*, 52, pp. 440-55; Dowd, T. J. 2003.

^{xi} Two million dollars were allocated to the effort in its first year according to the funding announcement at

<http://grants.nih.gov/grants/guide/rfa-files/RFA-HL-14-031.html>

^{xii} Published by the White House Council for Community Solutions at

http://www.serve.gov/sites/default/files/ctools/CommunityCollaborativeToolkit_all%20materials_1.pdf

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Appendix A: December 7th Meeting Participants

Peter Berkery, Executive Director, Association of American University Presses (AAUP)

Perry Collins, Senior Program Officer, National Endowment for the Humanities

Kathleen Fitzpatrick, Director of Scholarly Communication, Modern Language Association

Martin Halbert, Dean of Libraries, University of North Texas

Sarah Lippincott, Program Manager, Library Publishing Coalition

Maryann Martone, Executive Director, Force 11

Sarah Melton, Digital Projects Coordinator, Emory University

William Noel, Director, Schoenberg Institute for Manuscript Studies, University of Pennsylvania

Susan Skomal, President / CEO, BioOne

Andrew Torget, Assistant Professor, University of North Texas

John Willinsky, PKP Director, Stanford University

Appendix B: December 7 Notes

Highlights from the facilitated event include the following (note, in most of the working sessions of the day, participants were separated into two groups. These groups remained stable across all working sessions except the “conversation cafes” which were held at the end of the day):

The Overarching Challenge to Digital Sustainability:

Convergence appeared across two separate groups regarding a lack of common vocabulary, processes, and roles. Groups also agreed we currently lack baseline data regarding these and other facets of digital publishing. There was also a common conversation point around whether digital should be treated as distinct from print-based publishing systems, or whether the print-systems should adapt to be inclusive of the digital.

What Needs to Change

Separate groups both identified that the clarification, standardization, and legitimization of key processes needed to occur, inclusive of editing, evaluating, and citing digital content. Conversations around the relationship between digital vs. electronic versions of printed works continued.

2025 Vision for Digital Scholarship Sustainability

Two groups ended up in different places when tasked with formulating a vision. One solidified around the vision that by 2025, digital scholarship will have both the infrastructure and sustainability models to support it that print scholarship had in the 20th century. The other was more widespread, focusing on a variety of characteristics that fused back into this vision statement. The two groups agreed upon this vision statement as an accurate representation that was inclusive of all participants’ viewpoints.

Confirming the Players

Across two groups, all participants recognized that to reach their 2025 Vision, they needed to engage a diverse pool of stakeholders from all sectors (including: industry, government, funders, academy, and the general public.) The value of representing international organizations and perspectives from multiple academic disciplines was noted, as well as the need to engage the market drivers in the commercial space. The specific names of organizations, on-going initiatives, or individuals were then captured.

Backbone Organization

Initial thoughts and dialogue on who could play the role of a backbone organization led to a common understanding that the organization(s) must “act like Switzerland” and not have a seat at the table, but instead play an exclusive neutral, facilitation role. One group framed this as backbone “vertebrae” comprising individuals from multiple organizations who support and connect individual efforts to the overall roadmap (recognizing that the vertebrae would require dedicated staff time).

Metrics and Indicators

Participants did not have difficulty identifying ways to measure progress towards sustainability. Multiple impact indicators were identified for both publishing and digital scholarship.

Tangible Projects

Of nine projects pitched by participants, lifecycle documentation and metrics formulation received the most votes for further development. While participants documented first steps toward both projects, this was the point where attendee participation slowed. As facilitators, we took away that work sessions should stay well within this seven hour limit, inclusive of time spent on a working lunch.

Next Steps

All participants asked to be apprised of future development, and three (Fitzpatrick, Skomal, and Martone) specifically indicated their support for future work in this area, their desires to be “at the table” for next steps, and their individual intentions to take this methodology back to inform other work coordinated by their organizations.