



arXiv Member Advisory Board Meeting Summary September 22, 2015

Key Action Items

- 1) Convene three MAB subgroups to focus on the following issues:
 - Significant fundraising activities that will require time for planning and execution.
 - Subgroup Members: Tracy (chair), Steve, Carol
 - Identification of new revenue through the consideration of funding sources, such as federal agencies (e.g., NSF) and private foundations (e.g., Sloan, Clay) in order to embark on a significant IT overhaul.
 - Priority setting – what will be the scope of proposals? What is it that we want to be funded? The Special Projects section of the arXiv Roadmap provides some examples.
 - Quick fundraising strategies that can be implemented for CY2016 as Cornell starts the next membership drive in January '16.
 - Subgroup Members: Philip (chair), Esther, Karen, Tim, Molly
 - There's little knowledge that funding is a problem. There needs to be awareness building among libraries, research labs, and scientists about the business model and the state of arXiv and the need for expanding funding sources in order to ensure that the service continues its prominent role in scholarly communication (telling the story). The story needs to be positive such as, "Here's what we do, and here's how much better we can do it with additional funds." Take advantage of the approaching 25th anniversary milestone.
 - Also included in this group's charge will be adding a platinum-level membership tier (in addition to the existing model) in 2016 for libraries, research labs, publishers/societies, and companies such as Microsoft. Cornell has been successful in implementing the original plan to cover the operational costs while there is recognition that the original estimated operational costs for arXiv do not completely cover the costs of a program that should also support maintenance beyond the basics and a reasonable amount of growth in functionality to keep pace with technology evolution. The challenge is in speeding up the incremental improvements to the system by hiring additional staff (as the larger-scale renovation of the architecture is likely to be a 2-3 year project).
 - Review the Give pilot and decide if and how it should be implemented in the future.
 - Assessment of arXiv's technological infrastructure, UX/interfaces, resources, and workflows to consider the future of the 20+ year old system, especially within the framework of the special projects identified (see: Roadmap 2015).
 - Subgroup Members: Tommy, Lucie, Eva (chair tbd)

- MAB members suggest possible evaluator names to form an external evaluation team to Ithaca to recommend how to revamp arXiv and modernize the underlying legacy architecture.
- 2) Explore how to augment the Cornell arXiv team's capacity to devote additional time in significant fundraising activities such as identification of funding resources, making connections/networking, grant writing, etc. Cornell University Library needs to consider how to enable the arXiv team to engage in a new and intense phase of fundraising activities, similar to the activities undertaken while the current 5-year plan was being established (then enabled by a \$60K planning grant from the Simons Foundation). The current staffing model put in place to implement the 5-year business model, which did not factor in an intensive fundraising strategy. Consideration of hiring/assigning a staff member to lead the grant writing efforts.
 - 3) Jim Mullins is appointed as the MAB committee Chair. His role will be: "The Chair shall preside at all meetings of the Board and shall exercise general charge and supervision of the affairs of the MAB. The Chair shall see that all notices are duly given in accordance with the provisions of these Bylaws. The Chair shall facilitate open and inclusive discussion and decision making and shall attempt to state clearly the "sense of the Board" when he or she determines that all Voting Board Members are generally united in their judgment (in mutual concordance). The Chair shall perform such other duties as may be assigned by the Board."

Discussion Highlights

- The meeting began with an update on the arXiv program, including membership, finances, organizational model, scientific policies, moderation, IT, and the SAB's current agenda. The slides are available at:

<https://confluence.cornell.edu/display/culpublic/September+22%2C+2015+Meeting+Agenda>
- There was an extended and productive discussion about the original business model's focus on the baseline maintenance expenses and the need to expand significantly this model in order to incorporate a range of resource needs that are essential to position arXiv as a successful operation responding to growing requirements. CUL has been successful in reaching the fundraising goals set by the original plan and maintaining the baseline operation. However, arXiv is facing funding shortfall as the current resources are not sufficient to keep up with the growing list of projects that aim to make the moderation and submission process more efficient and effective. The 5-year business plan was developed based on an analysis of arXiv's baseline expenses during 2010-2012 and does not factor in any new functionality requirements or other unforeseen resource needs. Although a development reserve was established to fund such expenses, it is not sufficient to subsidize significant development efforts through surplus funds. Stewardship of resources such as arXiv involves not only covering the operational costs but also continuing to enhance their value based on the needs of the user community and the evolving patterns and modes of scholarly communication. We need to pursue grants and engage in collaborations to secure funds in support of a range of essential projects described in the Special Projects section of the arXiv 2015 roadmap:

<https://confluence.cornell.edu/display/culpublic/2015+arXiv+Roadmap>

- Both SAB and MAB members are engaged and passionate about the future of arXiv and emphasize the importance of generating new revenue streams to enable an IT infrastructure overhaul. Also, Cornell and SAB need to continue clarifying authority issues in regard to Paul Ginsparg's ongoing involvement in the arXiv operation as this issue will continue to be a distraction as we all try to strengthen arXiv as a service.
- It is important for arXiv member institutions to continue promoting the membership model. What are the compelling messages they can provide in such recruitment efforts (variations can be used for funders too)? For many communities (faculty, researchers), arXiv isn't about OA, but about essential research communication. Many libraries and researchers are unaware of arXiv's financial challenges and assume that it will continue.
- Seek assistance from SAB and MAB in identifying communities, industries, foundations, agencies that can contribute to arXiv.
- Should we consider revising tier pricing? Some libraries should be able to pay more as many of them are dealing with legacy code related issues on their own, and will understand the need to revamp arXiv. One idea is considering a higher-fee level (e.g., platinum or gold) for institutions with the heaviest users of arXiv (and who can afford it).
- What if Cornell is not successful in raising significant funds (a rough estimate is an additional \$1 million) within a couple of years? Does the arXiv operation need to be transitioned to another organization? How would this move be beneficial? If an academic unit, e.g. Physics Department, takes over the operation, libraries might not feel the same financial commitment and trust.
- Some MAB members think that if annual membership fees are increased, this will not be onerous to libraries whereas some felt that this will present a challenge for some institutions. We are already having challenges in convincing some libraries to be members even given the current tier model (e.g., there is only one member institution from China although the arXiv use is likely to be quite high). So leave the model as is but add a platinum level to encourage more generous giving. As we review the tier model, the overhead associated with negotiating with different organizational types (especially based on national policies) need to be factored in.
- When asked about raising an endowment or engaging the Cornell development group in fundraising, the arXiv team noted that the Cornell University Library provides a range of programs for various disciplines. arXiv is an important service area but the Library needs to have a balanced perspective in setting fundraising goals. Would it make sense to hire a dedicated development person? A dedicated, professional fundraiser could bring a return on investment that would break even within the year. Another idea was creating a separate 501(c)(3) foundation/organization. Again, the issue of approximately 35% overhead associated with establishing an independent organization was raised.
- There was strong support for a review of the technical infrastructure and user interfaces following concerns by members of the MAB about the long list of fixes and improvements required that is not diminishing. In addition there were concerns about the age of the software and the ability to progress with the current platform. A new infrastructure platform may provide a more agile opportunity to develop the system into the future. Members of the MAB saw this as important as fundraising and potentially warranting an investment from reserves.
- Cornell needs to come up with rough estimates for upgrading the IT infrastructure as a one-time significant investment and the ongoing maintenance costs after this vision is realized. Current annual expenses are in the vicinity of \$750,000 (not including indirect expenses). This does not include some of Cornell's cost-shares (e.g., Program Director and membership relations oversight). This cost estimate needs to be revised.
- NSF funding is a possibility for specific projects. Another strong possibility is the Sloan Foundation. Also mentioned was the Clay Foundation. SCOAP3 approached DOE – did not work. However, arXiv is widely known and respected and another discussion with DOE may be useful. How about the Wellcome Trust from the UK where there is strong support for Open

Access or the various industries/companies with heavy use? How about EU with their open science initiatives? Also mentioned was the Resource Corporation for Science Advancement (Lars Bildsten, Director of KITP and a friend of Chris, Steve and Dave, is on the Board of Directors).

- MAB members can be leveraged more fully. For instance, communicating with others (libraries, faculty) in conveying need for increased funding, etc. There's a tendency in the library community: if it's not broke don't fix it. Outsiders don't see arXiv problems. Cornell is currently taking it on the chin on this one, out of their own budgets to keep arXiv going, which is not sustainable. Not many libraries would jump in line to take it over. MAB could use a chair to take some of the load off of Oya.
- Could we get quotes from users about the importance of arXiv in their work? Access to arXiv is very important in the developing world. For instance, Google Scholar has ranked arXiv high. You can sell that message.
- Eva mentioned that the usage of arXiv identified with Finnish institutions is going down and the budget of the university will be cut 15%. There is a large Open Science Project in Finland that affects which projects are funded, as do the big EU projects. It is important to factor in different perspectives, not only the ones from the US where there is strong funding potential. In 2017, funding in other EU universities may also be decreased. It was discussed whether these large EU projects themselves should be targeted for arXiv membership if that is where the research funds are going.
- The Cornell team needs to stay positive with an emphasis on what can be done. "We might be able to do this, if....we can get help, you can give us a contact, etc."
- It would be useful to review the expectations of the MAB members. Video conferencing should be one of the options for the MAB subgroup meetings.
- Concerns about the "reluctance to let go" for individuals with long-term investment in arXiv's development over the years.
- Mentioned as a last-resort fund-raising strategy was charging for submissions, similar to the APC and providing free services for scientists from the member organizations. Even a modest amount of \$8/submission will be sufficient to raise significant revenues (although this will be against one of the arXiv principles).
- Continue to pay attention to the new funding mandates and potential impact on arXiv, especially on submitters. Some users think there won't be much impact, as they think of arXiv as for pre-prints. On the other hand, many assume that arXiv will be sufficient and arXiv is the solution. Will there be any risks that authors switch from arXiv to local IRs? For example, the arXiv communities in Australia continue to submit to arXiv, even though there is a government mandate to put in IR (and IRs can pull metadata from arXiv). In the UK, researchers will have to submit to IR or compliant repository. arXiv probably won't be considered compliant as it lacks some of the desired functionality. Should arXiv assign DOIs to articles?
- Mirrors are an imperfect backup and not an adequate archiving solution. Their original purpose was to shorten response time when the internet was a slower network by having servers geographically closer to clusters of users. Probably best to think of an appropriate backup solution, rather than the mirrors for backup. Perhaps an archiving solution with one or two remote member institutions. LANL and TIB (Germany) would be interested.
- China is involved in a project to provide an alternative search interface for arXiv which is based on arXiv's OAI-PMH interface. Simeon doesn't see a great potential for deep collaboration due to significant differences in development platforms.