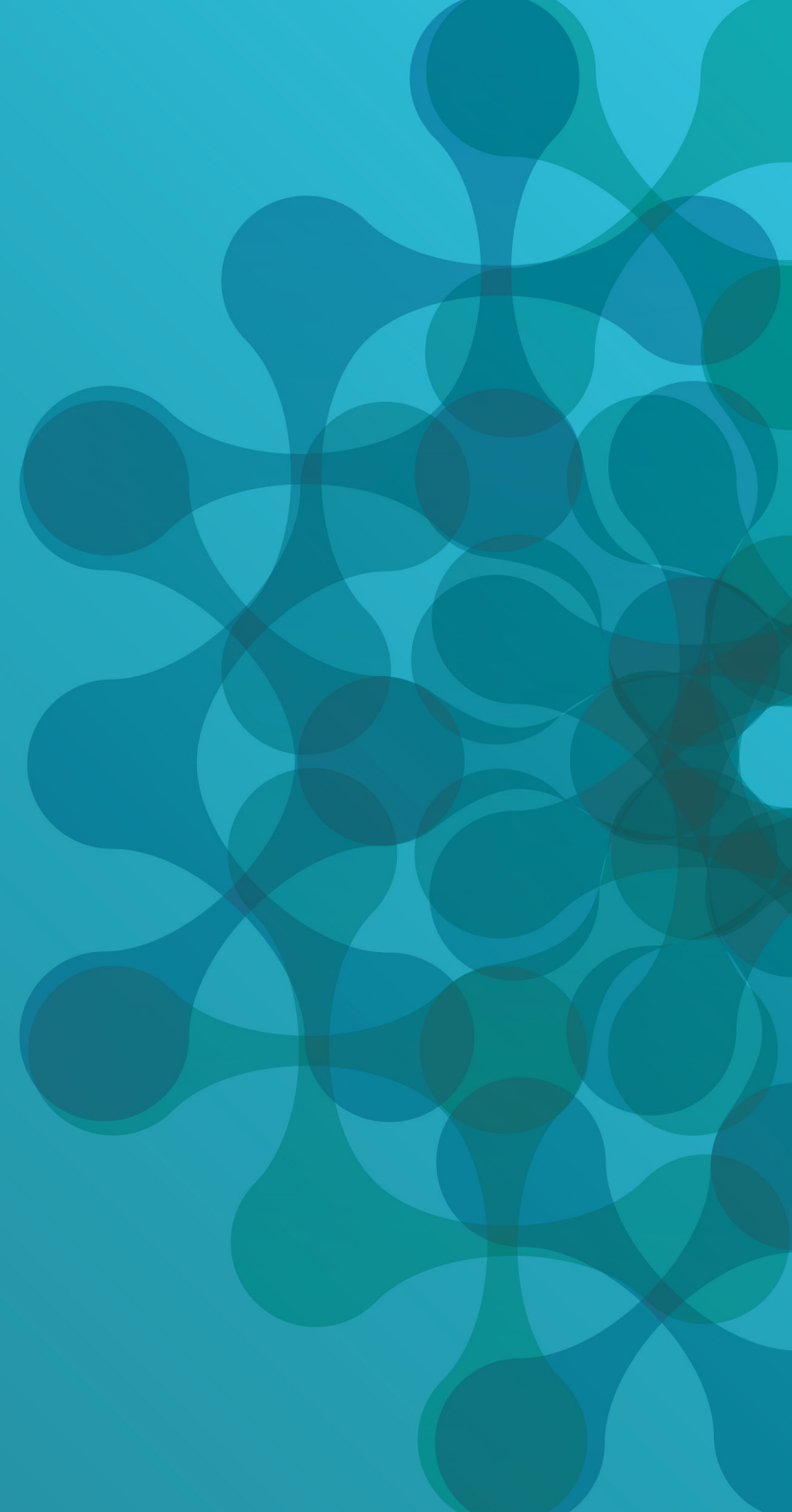# FROM PROPOSAL TO PRODUCT

Insights from the Knight Prototype Fund's experiments with early-stage ideas in media innovation

March 2017

IMPACT LAB

KNIGHT FOUNDATION

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EXECUTIVE SUMMARY

The [Knight Foundation Prototype Fund](#) seeks to catalyze media innovation through small investments in early-stage projects. Though the funded projects vary greatly in terms of goals and types of organizations supported, each Prototype Fund grantee receives $35,000 to experiment over a six-month period with developing and piloting an innovative idea. Since launching in 2013, the Prototype Fund has invested nearly $9 million in 255 projects. The Prototype Fund acts as a philanthropic angel investor and seeks to spread the use of human-centered design among grantees.

Knight Foundation hired The Impact Lab in 2014 to support learning among Prototype Fund grantees. The Impact Lab has worked with grantees to define key learning questions, design data-collection approaches, and review findings and reflections at the end of the six-month grant periods. In fall 2015, The Impact Lab surveyed grantees who were least six months out of the program to understand how the projects had fared.

Key findings include:

- **A new model for philanthropy.**
  The Prototype Fund has shown that a major
  foundation can act nimbly and invest in high-risk, early-stage ideas wherever they find them. The strength of the fund is in its ability to be nimble and support a wide range of experimentation across for-profit and nonprofit organizations.

- **A few wins, broader struggles.**
  A handful of projects have gained traction since graduating from the fund, evidenced through product usage and additional investment. The majority of projects had not launched a live product or attracted users outside of private testing even six months after the demo day marking the conclusion of the grant period. This partly reflects the inherent riskiness of projects supported through the fund. It also reflects struggles with achieving a working prototype during the six-month window of the fund experience, and it suggests the potential for additional supports for projects.

- **Design thinking training a success.**
  The vast majority of grantees recall the
  human-centered design training provided by design firm LUMA Institute as being the most valuable part of their Prototype Fund experience. Grantees discussed how it has influenced there work far beyond their Prototype Fund project.

- **Clarity of Goals.**
  The absence of clear state vision for success with measurable outcomes undermined the fund's efforts to support project alignment and learning. Defining success more intentionally may enable the fund to achieve greater impact and assemble a more coherent portfolio of projects aligned with achieving important outcomes.

Ultimately, the Knight Prototype Fund has demonstrated how a small investment along with nonmonetary supports, including design training, can advance successful projects and innovation. More strategic clarity and focus for the fund and the projects supported could greatly magnify the impact of the program.

ABOUT THE KNIGHT PROTOTYPE FUND

The Knight Prototype Fund launched in 2013 to identify, support and bring into existence transformational ideas in media innovation. The Prototype Fund supports media makers, technologists and tinkerers with a $35,000 grant to take an idea from concept to prototype. Over the six months of the fund period, grantees perform research, test assumptions and make improvements before launching a full product, application or project. Beyond funding, Knight Foundation provides grantees with supports that include a multiday workshop on design thinking, technical assistance and access to a community of peer projects.

The Prototype Fund serves several objectives for Knight Foundation: Foster the advancement of media innovation, develop a pipeline of grantees, support ideas that are on the fringes of traditional funding areas, and fill a gap between philanthropy and venture capital by funding entities that more traditional philanthropy often does not support (i.e., individuals and for-profit companies).

The nature of the individual projects varies greatly with little strategic coherence between grantees. Knight Prototype Fund projects have sought to do such varied things as create a virtual reality device

to encourage pedestrians to engage with their environment or technology to automatically send a photojournalist's work back to the newsroom. There is no unifying goal of the Prototype Fund projects. The Prototype Fund is the vehicle through which the foundation is able to scatter seeds, unsure of what those seeds will ever yield but with the hope that they are bringing to life important advancements in media innovation that might not

otherwise see the light of day.

Figure 1 below, which codes projects by theme, shows that the majority of projects funded in the three cohorts studied are digital technology projects with a strong tendency toward web applications and open-source software. Over time, the diversity of project types has grown to include library projects, mobile applications, education initiatives and more.

Figure 1: *Number of Grants by Category (cohorts concluding January-June 2015)*
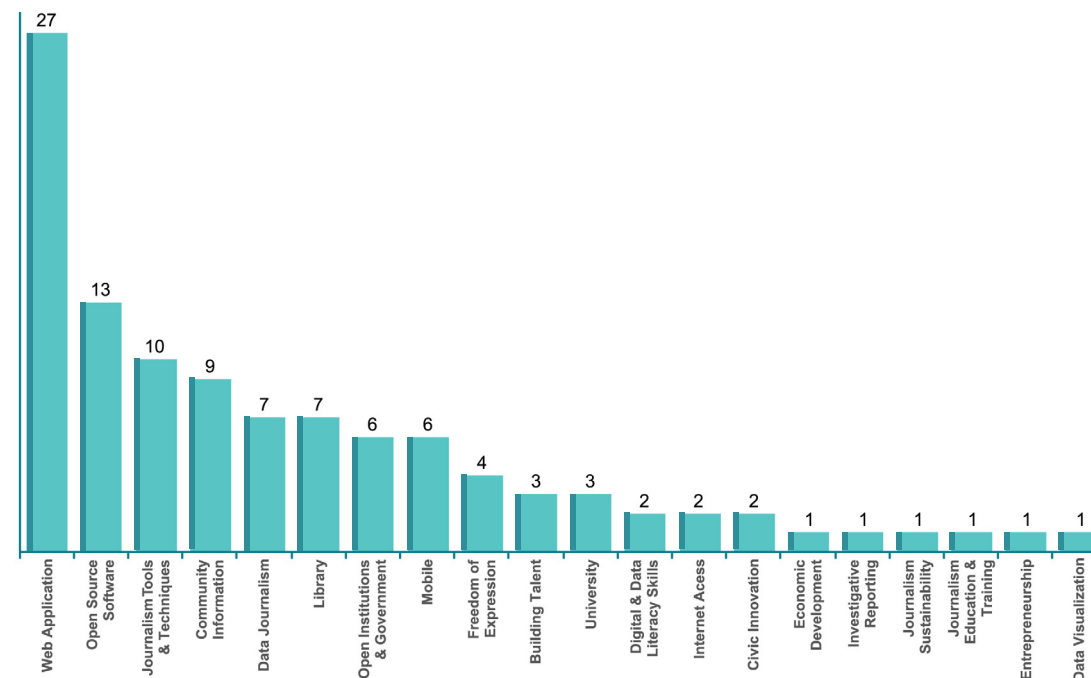
A major benefit of the Knight Prototype Fund is its ability to invest in many types of entities. As Figure 2 shows, nonprofits have made up a large percentage of grantees, but a significant number of education institutions, media organizations and individuals have received funding. Meanwhile, Figure 3, showing the geographic representation of fund grantees, mirrors areas of startup concentration more broadly (New York and California) but also shows that the fund is supporting projects between the coasts.

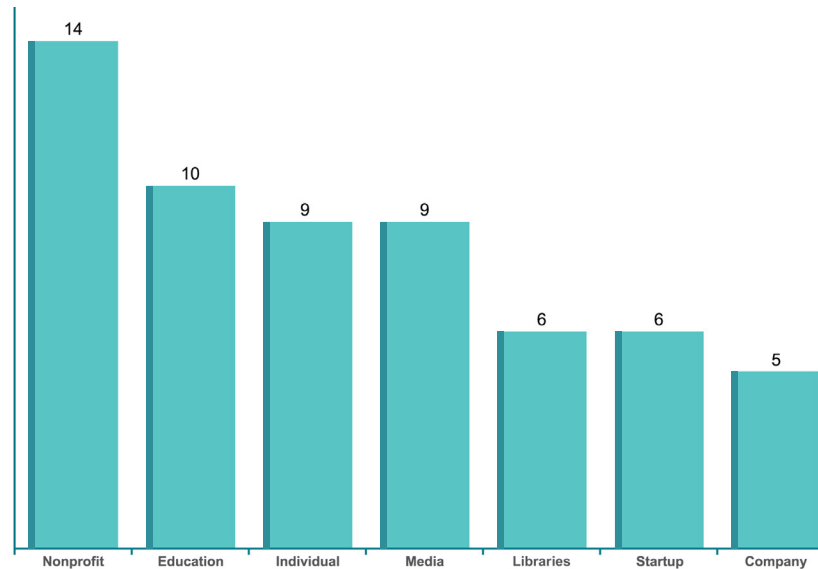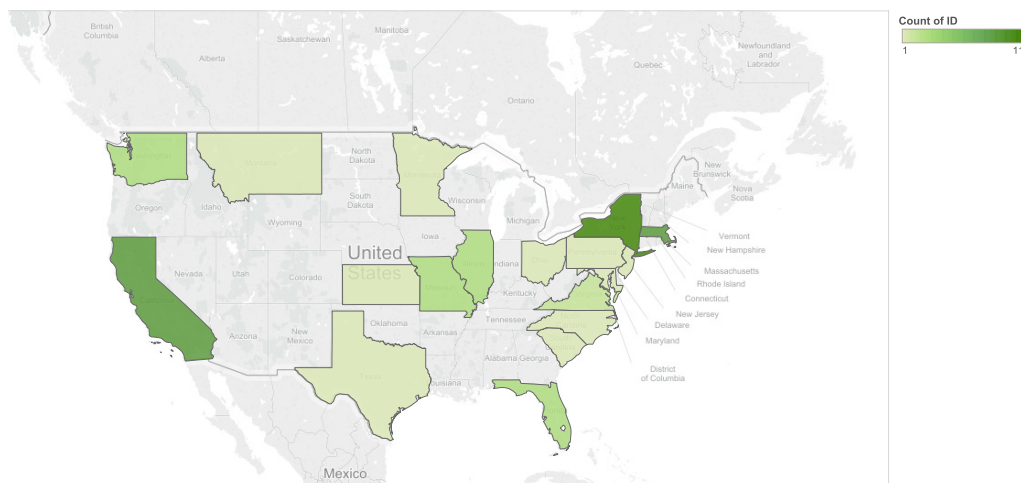*Figure 2: Number of Grants by Organization Type (cohorts concluding January-June 2015)*

Figure 3: Number of Grants by State (cohorts concluding January-June 2015)

METHODOLOGY

The Impact Lab began working with Knight Foundation in 2014 to strengthen the ability of Prototype Fund projects to identify and address key learning questions. The nature of this support was in developing the capacity of grantees for learning and in gathering insights for Knight Foundation about the fund.

Given the diversity of projects funded and lack of consistent goals, this review focuses on providing portfolio-level insights. The report organizes insights into two sections:

> • *Project Outcomes and Insights:*
> *examining the status and outcomes of projects, including whether projects are still active, whether projects have raised additional funding, and which projects have achieved the most noteworthy success*

> • *Prototype Fund Process Lessons:*
> *reviewing how the process and structure of the fund affected project outcomes and participating organizations more broadly*

The Impact Lab developed this report using data gathered through working with individual projects and through a survey it conducted with the three fund cohorts whose grants concluded between January and June of 2015. Thirty-seven out of 59 grantees participated in the survey, a response rate of 63 percent.

There are inherent limitations to the approach used to reach findings in this report. First, this is a small sample size and extrapolating insights from just a few dozen projects onto the entire fund should be done with significant caution. Also, survey responses may be influenced by self-selection bias in that projects that have achieved more success or are still active may have been more likely to have completed the survey than ones no longer actively pursuing their funded project.

PROJECTS ACTIVE SIX MONTHS AFTER DEMO DAY

Nearly everyone (91 percent) who responded to the survey said that their projects were still active. Only three projects (Swarmize, Breedrs and the Community Resource Lab at D.C. Public Library) classified their project as no longer active. These projects quickly discovered technical hurdles and not enough demand for what they were trying to create, and, given the necessary ongoing investment, were shut down following the Prototype Fund period.

A significant number of projects that said they were still active could only be considered active in a broad interpretation of the word. It would be impossible to engage with many of these projects, since they never developed an app to download, website to use or space to visit. Though some projects may have a website to visit or code on GitHub, they are not being pursued at this stage.

In fact, very few projects launched a publicly accessible product by the end of demo day or even months later for varying reasons. The code might be too buggy. They might not have received any interest from the users they were originally targeting. Prototype Fund support might have ended and with it all the financial support or organizational leeway they were given.

Figure 4: Number of Projects Self-Identified as Active


91%
34

9%
3

Yes   No
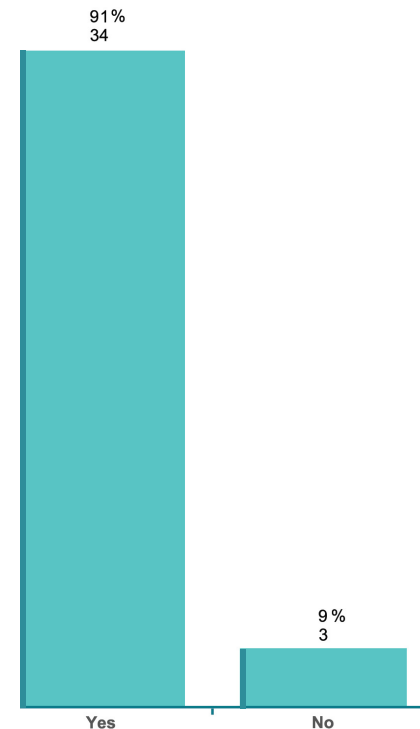
RAISING ADDITIONAL FUNDING

Of grantees responding to the survey, 41 percent (15 of 37) reported raising additional funding for their Prototype Fund projects. Four projects reported raising more than $500,000, including three projects which received at least part of this additional funding from Knight Foundation (StoryCorps, Hollaback and Online Toolbox for Local Election Websites) and one without Knight Foundation funding (Webrecorder/Colloq).

The entities finding additional funds have a bit more infrastructure and are the kinds of entities one might expect to be able to raise additional funding, but Knight Foundation often helps entities before anyone else. Many grantees also mention how helpful it is to say to future funders that they were part of the Prototype Fund and the value of Knight Foundation's imprimatur.

Figure 5: *Projects That Have Raised More Capital*
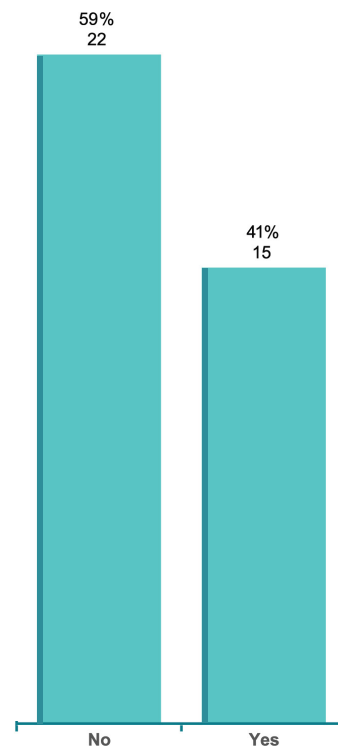
Several projects have succeeded either through infusions of additional capital or strong user growth.

- **SciStarter ($300,000 in additional funding):**
The SciStarter project expanded its capability to connect citizen scientists with data journalists and researchers. In particular, the project was used to increase the computational abilities of citizen scientists.

- **StoryCorps ($1 million-plus in additional funding and strong user growth):**
The StoryCorps project was used to prototype a mobile app that allows individuals to collect stories and perform interviews on their phone and share with the StoryCorps community. The project won the TED Prize.

- **The Center for Technology and Civic Life ($800,000 in additional funding):**
The center developed an online toolbox for local election administrators. The toolbox includes ways to better collect data and share it with the public.

- **Webrecorder ($600,000 in additional funding):**
The Webrecorder project has developed innovative tools to archive unstructured digital data.

- **Pilot for School (strong user growth):**
The Pilot for School project connected teachers and allowed them to share Virginian-Pilot news content.

Noteworthy themes that emerge from these initial successes include:

- The characteristic that seems most necessary (though not sufficient) for a successful project is that the technical ability needed to execute the project already exists on the team. Many grantees spend a lot of time and money trying to secure the technical resources necessary to execute their idea and if the lead on the project isn't very technical, often spend that time and money unwisely. None of the projects that have attracted additional investment or users have had to rely heavily on subcontractors for execution.

- The grantees that raised significant capital were technology-focused nonprofits that used the funding to launch new work aligned with their missions. These grantees tended to be smaller organizations, focused on technology, that had experience fundraising. So the question of causality — is the Prototype Fund causing change in the world? — remains quite murky because many of these grantees would have likely raised the necessary capital for these projects elsewhere. Conversely, projects funded with larger institutions and viewed as side projects have scaled less often in terms of operations and attracting additional funding. Michael Williams, a grantee with the University of Kansas, suggested that academic grantees have early conversations with their own institutions about how Knight Foundation works.

"If academics wants to be a part of the Knight environment," he said, "they should talk with their own development offices early to help manage expectations and to reach a mutual understanding of the process." Jennifer Yeung from Seattle Public Library wishes she had known more about her organization's process for managing proposals from vendors and getting approvals. "It surprised me that it would take several months to finalize the choice of vendor before we could begin work on the project."

The Prototype Fund has created ways of working around its own organization's bureaucracy, but it may run up against other bureaucratic organizations' constraints. Especially given how quickly things move within the Prototype Fund, it is hard for individuals from these organizations to ever feel like they are catching up if even just processing the grant falls behind.

HIGH PRAISE FOR HUMAN-CENTERED DESIGN TRAINING

Nearly 75 percent of participants labeled the design workshop at the beginning of the Prototype Fund as "extremely helpful" and many grantees referred to the materials they received and what they learned months later. Even grantees with previous exposure to design thinking said the training was useful and helped shape how they approached their project.

Jessica Yurkofsky from Book-A-Nook shared, "As someone coming into the project with a background in design (and 'design thinking'), I was surprised by just how much I thought about and used the strategies from the design workshop throughout the process. Even knowing how important that kind of user research is at all stages, this project reinforced how much further I could still go in my own work to make sure to build in these opportunities to learn from users."

In fact, the people behind the fund's most successful project from a user and fundraising perspective, the StoryCorps app, names the human-centered design training one of the most valuable aspects of their participation. Dean Haddock, who led the project wrote us this: "There is simply the StoryCorps before human-centered design and the StoryCorps after, where we are today. The team culture and the way we approach our work — in the Digital Team for sure, but also in other departments and divisions — are remarkably different and much more evolved. I think [human-centered design] may have been a missing link we've needed for a while. I see it as a windfall both for myself and the organization to have been introduced to [human-centered design], and it was one of the most valuable but least anticipated results of the Knight prototype award."

Figure 6: Responses to "How helpful was the HCD training?"

74%

23%

3%

Extremely
Helpful

Somewhat
Helpful

A Little
Helpful
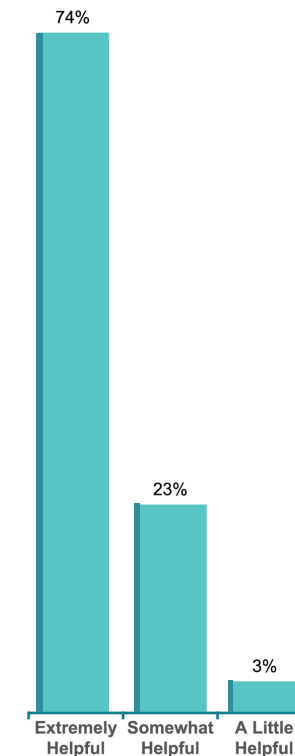
SIX MONTHS IS A (VERY) SHORT AMOUNT OF TIME

By demo day, very few projects have a working demo, let alone a version they can open up to users. Sometimes, a project's core development hasn't even begun six months after demo day. Given that most startup organizations take months to get to an early version of a viable product with a couple of developers working full time, it's understandable that Prototype Fund grantees who often do not have developers in-house would need more time to develop their projects.

Grantees continuously overestimate how much they can accomplish in six months and therefore overextend and don't get to a prototype. For many, the Prototype Fund project is in addition to daily work, and grantees must subcontract to developers at a market rate. Even spending all $35,000 on a developer can sometimes buy as little as five or six weeks of work.

Grantees at demo day almost always say they had no idea how quickly it would go, how difficult it would

be, and how little they would get done. Nicholas Diakopoulos from CommentIQ said "six months goes by in a blink, so be sure to set reasonable goals for that time frame."

The six-month expectation also makes it very challenging to execute the grant well. Many grantees struggled, waiting for weeks to receive their funding. Small organizations especially struggled because they could not afford to float the funding and get started with the project before funding arrived. This meant that a six-month sprint turns into an unrealistic four-month one if funding took seven or eight weeks to arrive.

CHALLENGE OF COHESION

Given that the grantees are so diverse, there is a question of the benefit of having them launch and go through the program in cohorts. Many grantees said they wished they were able to connect with their cohort and previous grantees more often. This was after they discovered one or two similar grantees to themselves, and also after they learned that other grantees had faced similar challenges.

What is needed is continued connection between grantees as they benefit from learning from their peers and hearing about their experiences.

An overarching takeaway from Impact Lab's support of learning alongside the Knight Prototype Fund has been the lack of cohesion among its projects.

This makes it difficult to examine the success of the fund beyond the results of individual projects.

- **Topical cohesion.**
  The Prototype Fund could benefit from focus. That focus could come in the form of either a business focus (i.e., to identify projects with market potential) or a programmatic focus (to develop tools beneficial to journalists). By focusing, the fund can better evaluate its performance. Focus would also help create an environment where the fund had better criteria for who should be accepted as well as a better idea of what kind of program would best help them achieve their goals. Right now, the fund is running in a bunch of different (albeit interesting) directions. Picking a single direction will help the fund cover more ground.

- **Matching funds requirement.**
  The projects that saw the Prototype Fund as free money to try out a new idea largely outside the scope of their core operations generally struggled and have not continued to pursue the project beyond the grant period. Requiring them to put up matching funds demonstrates greater organizational commitment from the outset and would weed out those unlikely to pursue the project longer term. Additionally, organizations able to raise a match from another investor would be demonstrating that others beyond Knight Foundation see the promise of the idea.

- **Funnel model.**
  The Prototype Fund experience is a one-size-fits-all model where all grantees have the same experience, from the human-centered design training at the outset through the conclusion six months later at the demo day. This doesn't account for the tremendous diversity of the projects and skill sets of the grantees. One could design it more like a funnel. Lots of people apply, many are sent to the design workshop (increasing that impact). Out of the design workshop, some are given the chance to refine their idea for some minimal amount of time without the expectation of a working prototype. Then, a smaller cohort is given the resources and time needed (longer than six months) to get to a working prototype for demo day. At demo day, maybe two or three are then chosen for continued support from the Knight Foundation based on hitting certain goals.

- **Nonmonetary technical assistance.**
  Grantees without in-house technical talent spent upward of half the grant period finding developers and designers to contract with on the project. If Knight Foundation does not elect to make in-house technical capacity a requirement for funding, it should consider how to equip nontechnical grantees with resources to more readily implement their projects, such as providing a recommended set of vendors or offering technical training. While requiring in-house technical talent would reduce the implementation struggles that have often plagued the progress of projects, it could wind

up reducing the demographic and geographic diversity of those who apply to the fund. Ultimately, the fund must weigh its broader goals to assess the trade-off of this decision.

The Prototype Fund set out to act like a philanthropic angel investor, spreading a little money among many very early-stage ideas with potential, and the results are in line with what one would expect. Some projects have found additional buy-in through users and funding. A few have found stable footing and are pursuing growth and sustainable funding. Many projects go nowhere. They are the wrong idea, the wrong team, the wrong time.

At this point though, it is too early to tell whether any of these projects will hit hockey stick growth and change the industry. That takes time. Most entrepreneurial ventures take a couple of years to hit that point. The early signs of that future success are typically venture funding and user growth. Not many Prototype Fund projects have succeeded in the months after demo day at attracting either funding or users. What will come from the Prototype Fund's first couple of years remains to be seen.

Will Prototype Fund projects succeed? Yes. And given the Prototype Fund's minimal investment in many of them, the rewards can be quite outsized. Will Prototype Fund grantees go on to succeed with other ideas because of what they learned through the Prototype Fund? It is likely. The fund has attracted smart, driven individuals with entrepreneurial interests. It is likely that this experience is helping shape some of them for future success. The Prototype Fund is also really helping organizations like StoryCorps think about innovation differently. It's giving people who would likely never experience something like this an important experience that will likely change the way they work. But could the Prototype Fund be doing these things more effectively? Yes. Primarily, the fund can be more focused on what success of their grantees would really mean and concentrate their focus there.

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