Crowdfunding

Navigating the New Frontier in Research Funding and Administration

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As grant agencies' budgets face reduction and proposal volumes increase, crowdfunding is becoming a viable alternative funding source for research, technology transfer, and support for the arts. Crowdfunding is the act of collectively raising funds by pooling together small donations from many individuals. Successful crowdfunding campaigns require the creation of awareness through social media and networks, such as alumni networks, institutional Facebook pages, or Internet communities (Wheat, Wang, Byrnes, and Rangathan, 2012). People across the world, through the Internet, donate to initiatives that are important to them or in their network. By harnessing the power of the crowd, funds are raised, and a goal is fulfilled in support of the proposed project.

Crowdfunding as an Alternative Funding Source

How does crowdfunding work? Projects are posted on a crowdfunding site that includes a description of the project (what the project is, why it is important, and how the funds will be used), a funding goal, and a time limit to raise the funds. Some project creators might even offer rewards to entice donors. The project leader then raises awareness about the project, attempting to raise the necessary funds within the timeframe. De-

pending on the policies of the crowdfunding site, after the time is expired, the project creator may receive all or none of the pledge contributions, depending on whether the funding goal was met.

A variety of websites specialize in facilitating crowdfunding by connecting the project organizer with potential donors. Crowdfunding websites also provide the financial services of collecting and delivering funds that have been raised. Each website has its own policies, fees, and regulations, and crowdfunding sites tend to specialize in the types of projects they post and promote. Sites such as Kickstarter.com and Crowdtilt.com appeal to a general audience and allow fundraising for social projects (such as parties and gifts), commercialization or start-up projects, as well as research or creative projects. Other websites specialize in research and creative activities; for example, Petridish.org and Scifundchallenge.org focus on science, while Artistshare.com is for musical endeavors. Such sites may be useful to research institutions and have already been discovered by some faculty members and the mainstream media (like NPR's Science Friday) as a new frontier in today's research climate.

When looking for an appropriate crowdfunding site it is important to know that three general crowdfunding models prevail: pre-sale, donation-

based, and equity-based (Stanco, Popma, and Totterman, 2013). Pre-sale crowdfunding raises money for commercialization of products. For institutions of higher education, this is an appropriate means for technology transfer. Typically people pledge funds with the expectation of receiving the end product. Equity-based crowdfunding is open only to accredited investors who are pledging for an equity stake in a start-up company. Donation-based crowdfunding sites allow people to donate to a project or cause. Typically these sites are registered non-profits that will issue receipt of a donation for tax purposes. Donation-based crowdfunding is most appropriate for research and creative projects.

Within these crowdfunding models, there are two main funding categories: all-or-nothing or all-donation. In all-or-nothing funding, a minimum pledge threshold is set, and it must be met in order to receive funds. If the goal is not met, donors are not charged and the project leader receives nothing. In some cases, the primary investigator has the option to either take none of the pledged contributions or pay a higher percentage fee in order to keep the pledges. In all-donation funding, the proposer may keep all donations.

It is easy to imagine how crowdfunding can potentially transform the research funding climate.

What's on my DESK

Diane Barrett's Desk

Of late, Dick Keogh and I, along with our team, have been interacting with PUI colleagues in the gathering of information useful in honing a cloud-based open-source grants management product that will be most effective for a greatly underserved population of institutions. In particular, I have been testing and providing demos with the compliance modules: IRB, COI and IACUC. I have never been directly involved with compliance and it's a lot of fun and uses my brain in ways I did not think possible, but, like everyone else in the field, we are working under some time constraints. One of my challenges is not only learning all of this new stuff, but learning it from a point-of-view I have not had before. Instead of working with the needs of just one institution, I am working with several. Each has its own flavor, its own business processes, its own strengths. It is looking at things in a more holistic way that is so refreshing, plus the cool opportunity of getting to know and work with so many research administrators across the country. The other challenge is simply the change of lifestyle from over 25 years at universities to that of a consultant. It is a bit like being body-slammed at first, but in a good way (mostly). It is a great new chapter in my life, but I'll be glad when it is not so new anymore. I'm very grateful to have Dick to guide me. We should all have such wonderful mentors, and NCURA is the place to find them.

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Investigators, not solely dependent upon federal funding politics and peer review, can now access a broader, diverse, and perhaps more open-minded audience willing to support riskier projects. Artists may use the web's inherently visual base to better promote their work. Institutions can use their own crowdfunding sites to target their angels and alumni. At our respective universities, Southern Illinois University Edwardsville and Michigan Technological University, we have been exploring the possibilities for crowdfunding platforms to fill the funding gap for our projects while also developing individual approaches that navigate the particular challenges we face as universities and/or sponsored research offices.

The Challenges

Individuals wishing to raise funds via crowdfunding must do so with awareness to the particular challenges of this market. Thousands of projects are posted on websites, creating high competition. Strong marketing strategies are required to attract interested donors. Often, the all-or-nothing game challenges proposers to not only set reasonable thresholds but also to strategize the best way to raise funds necessary to complete the project. As crowdfunding becomes more popular in academia, questions are being raised about the regulation of projects funded through such open sources and the role of the institution administering crowd-funded projects. If a faculty member uses institutional resources, the institution has an interest in regulating the use of its resources, and in keeping the crowdfunding project in line with compliance matters. Federal regulations require that institutions maintain consistent practices in managing and ensuring the compliance of externally-sponsored projects. Posting a project on a crowdfunding site becomes particularly delicate if the researcher wants to conduct a project that, say, uses human subjects.

Intellectual property (IP) is also at stake: does the crowdfunding portal ask the applicant to relinquish claims to IP? By posting crucial information regarding ideas prior to provisional patent applications, the investigator's and the institution's IP may be at risk. An examination of a crowdfunding site's policies and close review of information being disclosed in the campaign will need to occur for the university to protect their IP rights.

Furthermore, donors often have high expectations for outcomes gained through the project, and institutions have the responsibility of ensuring funds are spent appropriately. Wise proposers manage the expectations of their audiences and keep the donors updated about progress, lest they face the wrath of the individual donor wanting a refund! Donors want the assurance of prudent financial management of a project that should be offered by an institutional accounting system. Meanwhile, universities will desire to protect their institutional brand by regulating the types of projects advertised in their name and with their facilities. At state institutions like ours, we are careful to avoid the use of public funds and facilities for private gain, and the potential outcomes of projects that must be closely monitored. These matters raise questions about how to best track and report on a project: How does one communicate with the donors "post-award"? What is involved in reporting?

Finally, what is the best way to classify these crowd-funded projects—as gifts or grants? While the donations may be best considered donations, how does an institution manage the compliance, intellectual property, financial, reporting, and institutional brand issues above if there is no monitoring of the project? Is this an issue for the foundation or for the sponsored research office? While some foundations may have the mechanisms and network to attract donors, they may not have the accounting or compliance tools available to the sponsored research office. Many of the answers to these questions lie in the existing framework of an institution and the capabilities of different offices to manage aspects of an externally-funded/crowd-funded project.

Our Two Models

At Southern Illinois University Edwardsville, we have established a hybrid model that employs the strengths of both the Foundation and the Office of Research and Projects

(ORP). Our Foundation has great community connections and marketing ability not available to the ORP, but unfortunately has none of the ORP's accounting structure or compliance and IP monitoring abilities.

Faculty members hoping to use university resources for a project are asked to route a proposal for internal approval as they would other grants or contracts. Required materials include a description of the project, a budget, budget justification, and completion of our grant vs. gift checklist. The routing allows ORP and other administrators to stay abreast of the research activity occurring with their resources, as well as review of the project for important issues related to compliance, budgeting, and IP. The ORP can also be involved in budgeting and setting strategic funding threshold goals. Applicants are asked to include a small administrative fee of 10% for budgets of $10,000 or less and 15% for budgets greater than $10,000 to help recover administrative fees charged by the crowdfunding host and the University's own F&A costs.

Once the project has received approval, the project director will receive assistance from University Marketing in finding an appropriate portal and in developing a marketing plan with the university brand. Donations will be collected and run through Foundation accounts. This allows the project director access to the networking power of the Foundation and flexibility of a $501(c)(3)$. Donors receive their tax benefit through the Foundation. However, financial man-

agement of the project will be handed over to a grant accountant in the ORP who has the tools and knowledge to keep the project consistent with institutional accounting and reporting practices. Project directors will be asked to provide a final report on the project and proof of its distribution to the donors in order to keep them informed about the project.

Superior Ideas, our second model, is a crowdfunding platform, created and managed by Michigan Technological University, and open to any university to post projects on. Superior Ideas helps bring university research and public service projects that support science, technology, engineering, and math (STEM) to life. The mission is to increase external support for research, innovation, and creative work that promotes sustainable economic and social development.

Superior Ideas is an all-donation based model: every donation goes to the project regardless if the project funding goal is met or not. Projects are submitted online through the Superior Ideas website and then reviewed by the Superior Ideas team. The required materials include pictures, a description of the project, a budget breakdown, and an explanation of how the donations will be used. The team evaluates the proposed project based upon the type of research performed and whether or not it fits into Superior Ideas' overall mission. If it does not meet the set requirements, the project will not be posted.

Once the project is approved by the Superior Ideas team, it is posted on the site and can accept donations. Since Superior Ideas is an entity of Michigan Tech, donations are processed through the Michigan Tech Fund, which is a not-for-profit, tax exempt corporation $[501(c)(3)]$. When a donation is made online, a receipt is generated and emailed to the donor acknowledging their contribution.

If the project creator is from Michigan Tech, the donated amount is transferred at the end of the crowdfunding period into a restricted spending account in the Office of the Vice President for Research. If the project creator is from another university, the donated amount is transferred to an appointed liaison at that university. That university will determine the appropriate means to disperse funds to the project creator since every university has their own procedures.

Superior Ideas does subtract 7.5% from the final donated amount to cover the credit card processing fee and administrative costs. Even though the

donation is a gift, the money is only allowed to be applied to the project.

As we explore this new frontier in research support on our campuses, the needs of the researchers, the institution, and our donors are sure to catalyze change in our crowdfunding models. In the meantime, we continue to recruit faculty members willing to be pioneers in the practice of opening their research to the crowd. N

References

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Popular crowdfunding websites & affiliates include:

Kickstarter.com http://www.kickstarter.com

Rockethub.com http://www.rockethub.com

Petridish.org http://www.petridish.org

Scifundchallenge.org
http://scifundchallenge.org

Innovocracy.org http://www.innovocracy.org

Indiegogo.com http://www.indiegogo.com

Artistshare.com http://artistshare.com/v4

Artspire.org http://artspire.org/home.aspx

Crowdtilt.com https://www.crowdtilt.com

Microryza.com https://www.microryza.com