

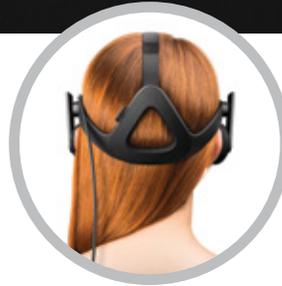
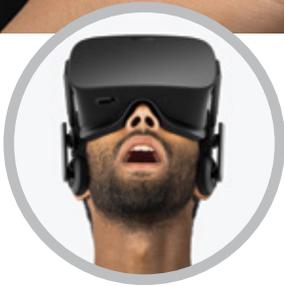
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How Crowdfunding Influences Innovation

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[ENTREPRENEURSHIP]

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BY MICHAEL A. STANKO AND DAVID H. HENARD

Crowdfunding is changing how entrepreneurs bring new products to market. It has allowed thousands of innovating entrepreneurs to raise money, build brand awareness, and join a broader conversation with large numbers of potential backers, all while still in the product development process. Examples of crowdfunded products include the Glif, whose creators raised more than \$137,000 for the device, which allows smartphone users to prop their

phones up at an angle or attach them to tripods, and the Oculus Rift, a virtual-reality gaming headset that raised \$2.4 million via crowdfunding. Oculus VR was later acquired by Facebook Inc. for \$2 billion.

We set out to better understand how crowdfunding affects innovation. To do this, we followed up with organizations that had developed products through funded Kickstarter campaigns (in other words, campaigns exceeding their

preset funding goal) at least one year after a crowdfunding campaign. Kickstarter, a platform founded in 2009 to focus on funding creative projects in the arts, community initiatives, music, and publishing, is a prime example of a reward-based crowdfunding platform, in which backers do not receive equity but instead receive some other reward for their contribution, such as a preorder of the product. Since its inception, Kickstarter has also morphed

into a funding platform for innovators creating technology products.

The more than 200 Kickstarter alumni providing data for our study collectively raised more than \$17 million from roughly 239,000 backers during their Kickstarter campaigns. Since we were primarily interested in product innovations, our research focused on four categories: technology, product design, hardware, and video

(Continued on page 16)

How Crowdfunding Influences Innovation (Continued from page 15)

games. By combining data from the campaigns with survey data from the crowdfunding entrepreneurs (concerning their product's market performance and their organization's innovation tendencies), we gained insights into how crowdfunding campaigns can help — or hinder — innovation efforts.

The ostensible goal of all crowdfunding campaigns is to raise money. Important as raising capital is, our research into crowdfunding campaigns has shown us that the most important benefits are not, strictly speaking, financial. Rather, successful crowdfunding campaigns offer enormous potential for fostering word of mouth about new products. Crowdfunding campaigns also provide a forum through which backers can provide valuable feedback and ideas to the originators of the campaign.

What is more, our research suggests that the nonfinancial benefits of crowdfunding are very important to entrepreneurs. One of our respondents told us: "We would have really struggled to advance our product without the feedback and engagement we received through our campaigns. Not to mention that the Kickstarter campaigns created a great deal of market awareness for our company." Of course, it helps that Kickstarter backers are generally a group of engaged early

adopters. Gaining awareness with this group is especially valuable to entrepreneurs; these early adopters tend to influence subsequent consumers.

Crowdfunding's Ups and Downs

From our interactions with innovating entrepreneurs who completed successful Kickstarter campaigns, it is clear that, even among this group whose campaigns were successful, there are both supporters and detractors of crowdfunding. Sentiment ranged from very positive ("Reward-based crowdfunding tools have changed the landscape for entrepreneurs. They allow [us] to quickly engage with a large customer audience to improve and accelerate the product development process.") to very negative ("We did a lot of research, but we were still clueless about how little Kickstarter would do for us in terms of the marketing and how poor of a method this is for funding.")

Recent research from Northwestern University's Segal Design Institute suggests that campaign creators often find crowdfunding to be time-consuming and strenuous. Publicity and backer relations require significant time and effort. For some entrepreneurs, these are entirely new skill sets.

What's more, after the campaign concludes, completing manufacturing and shipping to individual backer-customers can create logistical headaches. Some critics of the process pointed out that most of the

money raised through their crowdfunding campaigns came from a very small set of donors. In one case, a study participant told us that friends and family were the central backers. Several entrepreneurs mentioned that one cannot expect Kickstarter to deliver backers to a project. As one study participant told us, "You need to bring your own traffic to Kickstarter."

Market Performance

From our research, two elements of a crowdfunding campaign are consistently noteworthy: the campaign's openness to external ideas and the number of backers attracted through the campaign.

Openness Innovative organizations of any size can get ideas from both internal and external sources. Open tactics involve looking to external sources like customers, suppliers, distributors, and universities. In general, for the entrepreneurs in our study, the greater the openness to external new product development ideas, the greater the subsequent market performance of their product.

Backers The number of backers attracted is an important predictor of a product's future market performance. Interestingly, the number of backers trumps the amount of money raised as a driver of market performance. In fact, the amount of money raised through crowdfunding was statistically inconsequential to the products' future market

performance. This begs the question: Why?

For one thing, a study by Ethan Mollick of Wharton that was published in the *Journal of Business Venturing* found that only about 25% of technology and design projects funded on Kickstarter fulfilled deliveries to backers on time. In new product development, delays can often be accompanied by cost overruns — suggesting that the margins on preorders may be smaller than planned.

Our results emphasize the importance of individual backers beyond their wallets. Backers are often interested early adopters who offer ideas and feedback on the crowdfunded product. Importantly, backers can also spread word-of-mouth awareness to subsequent customers, enhancing overall market performance. One study participant declared that backers "tend to be good evangelists, and many like to show off their latest finds to others." This evangelism led to unexpected publicity and channel opportunities for some of the entrepreneurs in our study.

Backers often value the product development experience of "being along for the ride" — that is, observing and even providing input into the development and commercialization of a product. Our research showed that not all campaigns capitalize on backers' passion for participating in product development. That's not necessarily a good thing. In fact, our research showed that campaigns attract *fewer*

backers when most of the product development activities are completed *before* crowdfunding. Potential backers apparently value the perception that they are part of the development effort as the final product takes shape.

This desire by backers for inclusion is a powerful sociological effect that innovating entrepreneurs should recognize. Its power can be harnessed to attract backers. Interestingly, this runs contrary to the mindset of many equity-based investors, who would view a product further along in the product development process as less of a financial risk — and a potentially quicker return on investment.

Subsequent Innovation

In addition to studying the impact of a crowdfunding experience on the market outcomes of crowdfunded products, our research also focused on how crowdfunding affects big ideas in the entrepreneur's *subsequent* innovation efforts. According to our research, three key factors contribute to a focus on radical innovation in subsequent product development initiatives.

The Number of Updates to Backers Campaigns that consistently update backers take an active role in the innovation conversation (as opposed to passively monitoring it). Often, the crowdfunding entrepreneur circulates ideas to backers seeking feedback. According to one Kickstarter alumnus, updates “provide an easy outlet to

show off accomplishments, and that can be quite addictive when you keep getting positive customer feedback. There is more motivation to innovate, but most importantly, it is easier to innovate as you can bounce ideas off potential customers.” More updates lead to greater feedback from and interactions with backers, which ultimately leads to a heightened focus on radical product development in future initiatives.

Crowdfunding Early Entrepreneurs pursuing crowdfunding when product development is nearly complete are likely less interested in learning from backers and might be strictly concerned with the financial outcomes of crowdfunding. This lack of interest in learning from backers has lingering effects, leading the organization to have a less radical innovation focus in its future projects. Entrepreneurs who initiate crowdfunding campaigns relatively early in the product development process tend to focus on more radical innovations in subsequent ventures.

Openness Being open to outside ideas can foster a climate of constant ideation and a general willingness to investigate potentially worthwhile ideas, regardless of where they originate. Given that our research also found that openness helps a product's ultimate market performance, entrepreneurs would do well to embrace the open innovation concept.

The upshot? While money

raised from crowdfunding is obviously necessary for early-stage product development, its effects don't directly impact the later market trajectory of the product. When setting up a crowdfunding campaign, entrepreneurs should focus on recruiting and engaging as many backers as possible. Focusing only on the dollars would be myopic.

Serial Kickstarters

Of the product innovations in our study, 15% were created by individuals or organizations that were crowdfunding their third (or subsequent) campaign. We called this group “serial Kickstarters.” On the whole, they saw crowdfunding as a way to reduce risk in new product development and manufacturing. By setting a funding goal at a level assuring adequate volume for a profitable launch, they reduce the risk in new product launches. (On Kickstarter, if the funding goal is not reached, preorders and backers' pledges are canceled.)

Interestingly, serial Kickstarters tended to be less open to new product development ideas drawn from backers than were first-time crowdfunders. Based on our research, serial Kickstarters see crowdfunding as a means to a purely financial end as opposed to a source of constructive external ideas. One serial Kickstarter told us, “We use Kickstarter to connect to another base of enthusiastic customers.... The purpose is to help us target production

runs so as to keep unit costs as low as possible. But it does not really fuel innovation.”

Implications for Entrepreneurs

Our three recommendations for crowdfunding entrepreneurs are fairly simple:

1. Promote openness. Actively seek out ideas from customers, suppliers, universities, and professional organizations. Be open to insights from backers. Without this openness, entrepreneurs are forsaking much of the value of the crowd.

2. Crowdfund early in the product development process. Backers want to participate in the process, so don't shortcut the experience by waiting until the product is fully developed.

3. Structure your campaign to attract as many backers as possible — even those who will contribute small sums. Update these backers often regarding the product development process. Don't simply ask backers for money — ask them to share their thoughts as well.

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