1. INTRODUCTION

Crowdfunding introduces a new way for entrepreneurs to seek resources to launch ventures by soliciting support from extended online communities. Despite its impact to practice, scholars understand little about how crowdfunding users build ad hoc online communities to undertake this new way of performing entrepreneurial work. To better understand this recent phenomenon, we performed a qualitative study of 47 entrepreneurs who use crowdfunding platforms to raise funds to launch new ventures. Work includes preparing and testing campaign material, publicizing work on social media, following through with campaign goals, and reciprocating resources back to the community. We outline community efforts that support crowdfunding work, such as providing mentorship to novices, giving feedback on project design, and building a repository of example projects to serve as models. We also identify where community efforts and technologies succeed and fail at supporting the work in order to inform the design of crowdfunding support tools and systems.

1.1 Crowdfunding

Crowdfunding has emerged as the most recent Internet based technology to support the role of community in entrepreneurship. Entrepreneurship is often collaborative work—sharing information, resources, and connections in order to exploit new opportunities [Shane 2003]. Such collaborations have accelerated over the past few decades as the Internet has created new ways for resource exchange, especially among geographically distributed people. Crowdfunding—the online request for resources from a distributed audience often in exchange for a reward [Gerber and Hui 2013]—provides a new way for entrepreneurs to solicit financial support from a distributed network that can range in size from dozens to thousands of supporters. Crowdfunding platforms, such as Kickstarter, herald successful examples on their websites, such as the team that raised more than $13,000,000 in a month from 60,000 supporters to manufacture and distribute a multifunctional cooler [Kickstarter.com 2015]. While initial research describes the economic implications for crowdfunding [Belleflamme et al. 2011], geographical factors [Agrawal et al. 2011], and strategies for creating a successful campaign [Mitra and Gilbert 2014; Wash and Solomon 2014; Greenberg et al. 2013; Mollick 2013], there has been little empirical research to understand the day to day responsibilities of crowdfunding project creators and how they leverage their surrounding community for this new way of performing entrepreneurial work [Hui et al. 2014].

2. Study Design

We began our study by asking the questions, What is the work of crowdfunding? What role does community play in crowdfunding work? And, What current technologies support crowdfunding work and how can they be improved? We interviewed 47 crowdfunding project creators from three crowdfunding platforms—Kickstarter, IndieGoGo, and Rockethub. Projects included Art (7), Comics (1), Dance (1), Design (15), Education (1), Fashion (2), Film & Video (7), Food (4), Games (10), Music (3), Photography (3), Publishing (6), Science (4), Technology (1), and Theater (3). Approximately 50% of project creators met their fundraising goal on at least one of their projects, which is similar to the success rate of Kickstarter, the largest crowdfunding platform that we studied [Kickstarter.com 2013]. Participant ages ranged from 20 to 52 years old and raised between $71 and $313,371. We recruited interview participants through random and snowball sampling, which allowed us to identify typical and atypical participants from the crowdfunding population. Our semi-structured interview protocol was divided into two sections. In the first section, we asked participants about their professional background and how they learned about and became engaged in crowdfunding. During the second phase, we asked participants to describe the work involved - both collaborative and independent. We used selective coding and analysis [Spradley
to understand the work involved in crowdfunding. First, we flagged each instance describing work. After identifying all of the instances, we clustered tasks into conceptual categories. Initial data analysis for the semi-structured interviews began after 10 interviews, while the remaining interviews were used to gather data pertaining to emergent themes [Mintzberg 1979].

3. Crowdfunding Work, Role of Community, and Technology

We identified five main types of crowdfunding work: (1) preparing campaign content and initial prototypes, (2) testing the campaign material, (3) publicizing the crowdfunding project to potential supporters, (4) following through with project goals, and (5) reciprocating resources back to the crowdfunding community. In each of these stages, we identify how community and support tools facilitate or hinder the work process, such as providing search functionalities to learn from similar projects or sharing mentorship advice through blogs.

<table>
<thead>
<tr>
<th>Crowdfunding Work</th>
<th>Definition</th>
<th>Role of Community</th>
<th>Examples of Technologies Used</th>
</tr>
</thead>
</table>
| Prepare           | Prepare campaign materials | - Provide example projects as models  
- Provide general advice blogs  
- Give one-on-one advice  
- Offer specialized skill expertise | - Crowdfunding platform search  
- Third party project search platforms (e.g. Kickspy)  
- Blogs |
| Test              | Test campaign materials | - Give feedback on campaign materials  
- Provide opinion on design direction | - Email  
- Crowdfunding campaign page  
- Social networking platforms (e.g. Facebook, Twitter) |
| Publicize         | Market the project by using campaign materials | - Spread the word  
- Build an audience | - Social networking platforms (e.g. Facebook, Twitter)  
- Online forums (e.g. Reddit) |
| Follow Through    | Follow through with project goals and send rewards | - Provide manufacturing or shipping support  
- Offer specialized skill expertise | - Online skill marketplaces (e.g. oDesk)  
- Manufacturing support platforms (e.g. Backerkit, Fullfillrite, Teelaunch) |
| Reciprocate       | Reciprocate resources back to the crowdfunding community | - Provide advice  
- Provide financial resources | - Blogs  
- Personal webpages  
- Email  
- Crowdfunding platform donations |

Table 1: Table of crowdfunding work, including definitions and summary of the role of community throughout the work process.

3.1 Prepare the Campaign Material

Preparing the campaign material typically includes creating a video, project description, funding goal, campaign timeline, and reward descriptions to be posted on the campaign page. To facilitate learning from others in creating these materials, project creators investigate other people's project pages. However, most platforms do not offer the ability to search for failed projects, or filter by funding goal, number of supporters, or campaign duration, campaign features that project creators cite as important ways to compare and contrast to their own campaign to others. In response, frustrated creators have started to create their own support tools [KickSpy n.d.] that allow creators to find relevant projects from which to take inspiration.

3.2 Test the Campaign Material

Creators test their campaign material by asking for feedback from their personal network and extended community of supporters. We find that creators who actively seek feedback before and during the campaign tend to be more successful, which is consistent with research on the importance of getting feedback during the design process [Cross 2006]. Creators first seek feedback from their personal network through email, such as close friends and family, because they preferred to be judged in a private
setting by people they trust. Following this initial stage, creators reported turning to their extended networks to seek feedback on project direction either through social media or on the campaign page. For instance, the creator of a snowshoe design project let his supporters decide the color of the shoe straps. Unlike traditional producer-consumer relationships, such as buying a product on Amazon, crowdfunding project creators are able to involve the supporters throughout the design process by polling for their opinions or conversing with them on a discussion board.

3.3 Publicize the Project
Creators market their project by publicizing their idea through social media, contacting people individually through email, and sending press releases to news media outlets to reach a wider audience. In an effort to harness the power of their social network, creators ask their friends and family to spread the word. Others reach out to existing online niche communities in order to contact people that are interested in the specific project topic. For example, the creators of one game project on Kickstarter maintained an active Reddit page of 2,800 followers in which they kept supporters updated on the campaign and game progress. While some reported their project going viral, leading to a boost in support, others had trouble making any impact in the online space, suggesting that creators may need further guidance in learning how to understand leverage their network connections.

3.4 Follow Through with Project Goals
Creators who make it to this stage of crowdfunding find the public commitment of manufacturing and shipping rewards to be overwhelming because they must publicly answer to hundreds or thousands of supporters. In an effort to ease their responsibilities, some creators describe tapping into communities of skilled labor to outsource some of the work. For instance, a creator of a board game project described how he reached out to people in the gamer community who had design skills in exchange for part of the crowdfunded amount. However, many project creators are not part of an existing supportive community. One participant described how she could not send her rewards out until months after her promised deadline because she tried to do all the work on her own. In response to these difficulties, project creators and other companies have begun to develop tools to support the organization of supporter information and reward shipment [BackerKit n.d.; Fullfillrite n.d.; Teelaunch n.d.].

3.5 Reciprocate Resources
Creators consider contributing funds and advice back to the crowdfunding community as a critical task to maintaining a sustainable ecosystem that supports collaboration rather than competition. Creators contribute back knowledge by posting relevant online resources, such as blogs about their experience, or offering one-on-one help in person or through email. For instance, one board game creator explained how he created a Pinterest board where he posts links to articles that answer commonly asked questions. Another successful crowdfunding team created public Google Documents templates of how to format a supporter email, press email, media management spreadsheet, supporter management spreadsheet, and project description. While some creators have become well known in the crowdfunding community as mentors, most project creators contribute back through funding.

3.0 Conclusion
We must seek to understand how the involvement of community support and technologies are changing the entrepreneurial work process. In this qualitative study of crowdfunding work, we find that many people underestimate the work involved and find themselves overwhelmed with the responsibilities of coordinating and answering to a large crowd of supporters. To overcome such obstacles, creators rely on mentorship, support tools, and outsourced help to accomplish their goals. We hope to build on this environment of mutual support by calling for collective intelligence researchers and designers to create support tools and systems that help crowdfunding project creators leverage the collective support of their communities [Woolley et al. 2010] to implement more innovative ideas.

REFERENCES


DOI: http://dx.doi.org/10.1145/2530540


