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Crowdfunding: Why People Are Motivated to Post and Fund Projects on Crowdfunding Platforms

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ABSTRACT

Computer-mediated crowdfunding is an emerging paradigm used by individuals to solicit funds from other individuals to realize projects. We are interested in how and why these platforms work and the impact they can have on what projects are realized and how they are disseminated in the world. In this paper, we report preliminary findings from a qualitative exploratory study of creators and funders on three popular crowdfunding platforms. In addition to anticipated extrinsic motivators, such as securing funding (creators) and consuming products and experiences (funders), our initial findings suggest that people are also motivated to participate because of social interactions realized through crowdfunding platforms, such as strengthening commitment to an idea through feedback (creators) and feelings of connectedness to a community with similar interests and ideals (funders). We present this research in the context of what we are calling *motivational crowdwork*, the investigation of motivation as it relates to online task outsourcing, and discuss ideas for ongoing work in this area.

Author Keywords

crowdfunding, motivation, online community

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION

Crowdfunding is defined as an open call over the Internet for financial resources in the form of a monetary donation, sometimes in exchange for a future product, service, or reward. [1][2]. Crowdfunding uses web technologies and existing online payment systems to facilitate transactions between creators (people who request funds) and funders (people who give money). Crowdfunding platforms, such as RocketHub, Kickstarter, and IndieGoGo provide opportunities for anyone with Internet access to pitch an idea to their social network and beyond and to gather funding to realize their work. Ideas span across fields and vary in scope, from a jazz musician seeking funds to embark on a tour, to an academic looking for money to write and self-publish a book, to a product designer with an



A funder considers whether to fund a project on Kickstarter, a crowdfunding platform. Initial findings suggest that people are motivated to launch and fund projects on computer-mediated crowdfunding platforms because of social interactions and feelings of connectedness to a community with similar interests.

idea for an iPod holder.

Soliciting money from the crowd stands in contrast to traditional fundraising efforts such as securing funds from banks, venture capitalists, and foundations. Creators develop a profile on a crowdfunding platform and explain their monetary goals, planned use of the funds, and timeline for reaching their goals. As an example, two friends with an idea but no connection to capital raised USD \$306,944 in 37 days to develop a coffee warming product on a crowdfunding platform [3]. In the process of exploring crowdfunding, they developed an innovative coffee product, marketed the idea, managed customers and finances, and delivered a product. Funders who pledged \$40 or more received the new product when the fundraising goal was achieved.

Currently, there are more than 50 crowdfunding websites in the US, and they are experiencing an exponential growth in popularity. Kickstarter.com, which started in 2009, now has more than \$7,000,000 pledged per month [4].

Despite the explosion of research around social networks and online communities in the Human Computer Interaction (HCI) research community, few scholars have examined crowdfunding. Understanding crowdfunding is critical as small individual contributions from creators and funders can lead to the formation of new companies, the realization of new professional identities, and fundamentally impact how we function economically and socially as it changes how, why, and which products and services are brought into existence.

This exploratory study attempts to understand what motivates participation in crowdfunding and how designers can make use of motivational affordances, the properties of a design that determine whether and how it can support one's motivational needs [5], to influence user behavior.

The paper is organized into three sections. The introduction sets the stage for this work, including a history of crowdfunding and related research on social lending, online communities, and buying and giving behavior. The second section presents our current research and initial findings from our ongoing research project, identifying motivations from both the creators' and funders' perspectives. The third section discusses the broader implications of this work and our ideas for continuing research, as this work is preliminary. This exploratory study is one of the initial studies investigating motivations for participation in crowdfunding from a behavioral science and human computer interaction perspective.

History of Crowdfunding

Crowdfunding is derived from the broader concept of crowdsourcing. Coined in 2006, crowdsourcing is defined as a way to harness the creative solutions of a distributed network of individuals [6]. The vision of crowdfunding is to harness the power of the crowd to fund small ventures, projects that are unlikely to get funded by traditional means, using crowdfunding platforms or social networks, such as Twitter, Myspace, and Facebook [7]. To realize this vision, crowdfunding platforms provide a platform for creators and funders to exchange resources to realize ideas.

Before computer-mediated crowdfunding, creators often engaged in personal crowdfunding initiatives. For example, musicians would publicly ask their fans to fund a new album or tour. Fast-growing crowdfunding platforms now fund a diverse range of projects, such as fashion, film, product design, and software.

This year, the US government recognized crowdfunding as a key to economic growth because it allows more individuals to engage as producers and consumers in the economy without the backing of high net-worth individuals

or institutions. On November 3, the US House of Representatives passed The Entrepreneur Access to Capital Act, to encourage more people to request and back ventures. The legislation is sitting in the Senate for approval [8]. Such governmental interest and support suggests that crowdfunding will continue to grow.

Crowdfunding platforms such as Kickstarter, RocketHub, and IndieGoGo have typically been used to post "creative projects" seeking funding in return for a reward, often in the form of a tangible product or experience. Unlike disaster relief donation sites, funders expect something in return for their pledge. Unlike peer-to-peer lending platforms like Prosper.com [9], funders did not expect to be repaid monetarily. And unlike peer-production platforms such as Wikipedia [10], participants are seeking funding rather than cognitive resources to complete a task.

Crowdfunding Research

Crowdfunding research has primarily been the purview of economists and management scholars. Economists study consumer behavior and how consumers continually make choices among products and services. They examine advantages of crowdfunding such as practicing menu pricing and extracting a larger share of the consumer surplus, and disadvantages of crowdfunding such as constraining the choices of prices to attract a large number of funders [11]. Management scholars find crowdfunding eliminates the effects of distance from funders whom creators did not previously know [12].

Despite the link between motivation and contributions to online communities [13], few scholars have investigated motivations for crowdfunding. In a 2010 study, Belleflamme and colleagues analyzed results from a closed question questionnaire completed by 4 entrepreneurs who used online crowdfunding platforms and found that raising money, getting public attention, obtaining feedback on product/service motivated participation. Our work seeks to build on this initial work. We take a grounded research approach to examine motivations for participating in crowdfunding, rather than hypothesizing what is to be found so as not to unnecessarily constrain the emergent framework [14]. Gathering contextual details about motivation will inform design principles for crowdfunding platforms. Further, an examination of a diverse set of participants including all types of creators and funders in the crowdfunding community rather than just entrepreneurs is needed to provide a rigorous framework for why people participate in crowdfunding.

Peer-to-Peer Lending

Crowdfunding is related to peer-to-peer lending in which individuals bid on microloans sought by individual borrowers [15]. Like crowdfunding, few peer-to-peer lending sites existed before 2005. The largest peer-to-peer

lending website is Prosper.com which has raised \$74.85 million in funding since its inception [9].

To increase the number of projects funded, a handful of marketing and communication scholars find strategies, such as the use of hard information in product detail [16], extended narratives and concrete descriptions [17], endorsement by group leaders [18], and building strong interpersonal connections [19], influences project funding success, defined as reaching the funding goal.

HCI researchers find that while soft information, such as personal information, leads to a more positive perception of the borrower, it is not enough to reduce borrowing interest rates [20]. In support of their study, Ortega and Bell, conclude that ZOPA, a peer-to-peer lending platform empowers members to construct their financial identities by allowing them to make complex financial decisions [21].

While this initial research has inspired new best practices for peer-to-peer lending, few HCI researchers have explored a motivational perspective despite a demonstrated link between motivation and online communities [13] [22]. Our research seeks to understand motivations for participating in the separate, but related field of crowdfunding in response to the rapid growth of the phenomenon in the last three years.

Online Social Communities

Crowdfunding platforms depend on an online social community. Drawing on the social sciences, scholars propose how to get such a community started, integrate newcomers, encourage commitment, regulate behavior when there are conflicts, motivate contributions, and coordinate those contributions to maximize benefits for the community [23].

Scholars identify motivations for contributing to online communities, including desire for knowledge, social standing, peer companionship, approval, desire to improve society, and to be autonomous [13]. Weng and Fesenmaier categorize motivations in five main categories: instrumental, efficacy, quality assurance, status, and expectancy [22]. An example of instrumental motivation is using Facebook to expand one's social network. Specific instrumental motivations include seeking/providing emotional support, finding friends/peers, relationship building, group attachment/commitment, expressing identity, and increasing self-esteem/respect. Second, an example of efficacy as a motivation is providing health advice on an online health forum. Efficacy motivations include satisfying other members' needs, being helpful to others, seeking/providing advice, and sharing enjoyment. Third, an example of quality assurance motivation is editing Wikipedia to make sure information is correct and up to date. Basic quality assurance motivations are controlling products, service quality, and enforcing suggestions/evaluations. Fourth, status motivations include

gaining prestige and attaining status in the community. Lastly, an example of expectancy as a motivation includes waiting for a reply on a Twitter feed. The main expectancy motivations are seeking future exchange from anybody and seeking future exchange from someone who provides help [22].

Our work seeks to build on this work. But, rather than focus on communities organized around knowledge sharing, we focus on communities organized around funding.

Motivations for Giving

Researchers who study the psychology of giving seek to understand why certain people give and how to get more individuals to give. Factors for giving include sympathy and empathy [24], guilt [25], happiness [26] and identity [27]. The framing of request can also influence the amount of the donation [26]. For example, in laboratory and field studies, researchers found that people will ultimately donate more money to a charity if first asked how much time they would like to donate (versus how much money they would like to donate) [26]. Collectively, this research suggests that motivations for giving are related to interpersonal connections between the giver and the requester and communication styles.

Similarly psychologists and marketing scholars seek to understand why certain people buy and what influences people to buy more. Pucinelli et. al. suggest that goals, schema, information processing, memory, involvement, attitudes, affective processing, atmospherics, and consumer attributions and choices are the key elements of consumer behavior that drive the consumer decision process [29]. With the rise of purchasing in virtual worlds, such as SecondLife and EverQuest, researchers have begun to examine why people purchase virtual items in virtual communities with real money. Motivations include social influence, perceived enjoyment, and character competence [30]. Collectively, this research suggests that there are personal and situational factors that influence monetary spending.

STUDY DESIGN

To study the motivations for participating on computer-mediated crowdfunding platforms, we are using an inductive research approach [31]. Specifically, we are conducting one-on-one semi-structured interviews with crowdfunding creators and funders, following an interview question protocol developed with the understanding that additional questions may emerge as people provide experiential information and/or as clarification is needed. We are in the preliminary stages of our research.

Participants

We have interviewed 11 informants (5 women). Three informants have exclusively created projects, 6 informants have exclusively funded projects, and 2 informants have both created and funded projects, and 3 senior executives representative of each crowdfunding platform. Expertise

ranged from student to professional with 19 years of experience. Project type range from DNA research to a theatre project about race. Participants were recruited through a snowballing method and were not compensated for their participation.

Interviewed creators requested between \$2,000 to \$6,000 and raised between \$2,261 and \$9,961. Interviewed funders pledged between \$5 and \$250. Individual funders supported between one and three projects. All participants are US-based creators and funders.

Within the next 5 months, we intend to conduct interviews with 30 project funder and creator pairs (total of 60 people).

Measures

Our semi-structured interview protocol is divided into three sections. In the first section, we ask participants about their professional background and how they learned about and became engaged in crowdfunding. During this time we are trying to establish a rough timeline of the creator or funder's experience, which we can use to understand the sequence of actions and associated motivations.

During the second phase, we ask participants to describe their motivations for using a specific crowdfunding platform.

During the third and final phase, we ask participants how crowdfunding influenced them and their work. We also ask them about current involvement today and to share any additional comments. The goal of this phase is to understand how crowdfunding influences them personally and the way in which they work.

The average length of the interview is 30 minutes (with a minimum of 15 minutes and a maximum of 1 hour and 3 minutes). Six of the interviews were conducted over Skype or phone. All interviews are audio-recorded and transcribed for analysis.

Interviews are being conducted at different stages of the funding process to understand if motivations differ over time. The advantage to this research approach is the ability to collect real-time data, not just reflective data; the disadvantage is that bias is introduced through participant observation [32].

Data Analysis

We are interested in why people use crowdfunding from both the creator and funder perspective. To do this, we reviewed all transcripts and used the process of open coding [31], in which we coded all instances where informants communicated motivation. After identifying all of the instances, we clustered motivations into conceptual categories. We plan to apply (and possibly modify) these codes when we have more data using Nvivo, a qualitative data analysis software used to code interview transcriptions.

The next section presents these themes grounded in data collected during the interviews, which illustrates the

phenomena and pertinent behavioral research. All quotations are directly transcribed from interviews without grammatical corrections. We organize these findings to present a new framework for why and how people participate in crowdfunding.

Crowdfunding Platforms

We selected Kickstarter, RocketHub, and IndieGoGo as our computer mediated crowdfunding platforms to study. On all three platforms, creators own the intellectual property and funders receive a "reward" in return for their donation. Examples of rewards include a ticket to a concert, a product, or a lunch with the creator. Funders do not become owner nor do they expect to be paid back. Compared with all Internet users, crowdfunding platforms tend to appeal to childless college graduates under the age of 35 who browse from work and have incomes over \$30,000 [33]. The time spent during a typical site visit ranges from 4 to 5 minutes.

While three sites identify as services providing an alternative funding model to the arts and sciences (broadly defined), there are differences in audience demographics, funding models, and terminology.

Kickstarter attracts creators and funders from the USA, whereas RocketHub and IndieGoGo attract creators and funders globally.

Kickstarter uses an All-or-Nothing funding model, which means that if a funding goal is not reached, the funds are returned to the funder and the creator receives no funds [3]. The success rate is 43% [4]. RocketHub adopts the All & More fundraising system. Creators can keep the money they raise even though their funding goals are not achieved. If creators reach or exceed their funding goals, RocketHub will offer an additional benefit, which is to waive the submission fees (4%) for creators' first five projects launched [34]. Similar to RocketHub, IndieGoGo uses the keep-what-you-raise funding model. However, a higher fee will be charged from creators if they don't realize the funding goals [35]. All require the creators to pay the payment process fee (if the goal is reached) charged by Amazon Payments or Paypal (between 3-5%) [3][34][35].

While Kickstarter refers to people who request funds as "creators," RocketHub refers to people who request funds as "creatives," and IndieGoGo refers to people who request funds by their domain expertise (such as "designer" "inventor," or "activists") [3][34][35]. When describing the results from our qualitative study, we refer to people who request funds as "creators." Similarly, while Kickstarter refers to people who pledge funds as "backers," RocketHub refers to people who pledge funds as "fuelers," and IndieGoGo refers to people who pledge funds as "funders" [3][34][35]. When describing the results from our qualitative study, we refer to people who pledge funds as "funders."

Preliminary Findings

We report preliminary findings for why people participate in crowdfunding from both the funder and creator perspectives and offer qualitative evidence from our interview data.

Creators: Raise Funds

Our preliminary findings suggest that creators participate in crowdfunding for the anticipated reason of raising funds. As one innovator commented:

"We used [Kickstarter] as our fundraiser. It was good for us because we didn't have a way to collect money."

Not only do platforms provide a way to collect payments online, crowdfunding platforms also provide a way to accept small payments from a large number of people. As one creator commented:

"I think the basic reason for me to use [Kickstarter] is getting financial support from a lot of small contributions, which I like, which is different from going and applying for a grant, from, you know, an organization. ... it's a very different process. And I like the process of ... crowdfunding. It's satisfying."

Not only are creators motivated to raise funds, but they are motivated to raise funds in a democratic way. A respondent noted:

"...it feels...you know, democratic, and people are able to contribute if they want and not to contribute if they don't want."

Platforms encourage creators to submit a project even if securing financial resources are not critical to its success. On the Kickstarter website in response to the frequently asked questions, "I'd like to use Kickstarter to get my project out there, but I don't really need money. Is that okay?" Kickstarter responds:

"Kickstarter is about more than just money. A Kickstarter project is a great way to connect with your audience and spread the word about your work."[3]

Funders are motivated to raise funds in a way that is consistent with their values. This is consistent with identity-based motivation in which people are motivated to give in ways that are consistent with their identity [27]. This is also consistent with identity-based motivations for joining online communities [13].

Creators: Establish Relationships

In addition to raising funds, initial evidence finds that creators are motivated to engage in crowdfunding for the direct connection to the funders through a long term interaction that extends beyond the moment of the financial transaction. An informant noted:

"[The funding process] creates a longer-term connection to people that you know. Weeks later, months later, you're still interacting, and they are expecting to get something....I

think potentially you can build relationships with people, you know, over the course of time."

Such committed long-term interactions allow creators to collaborate directly with funders, blurring the role between producer and consumer. An informant noted:

"[Participating in Kickstarter] made me realize that I don't want my projects to be like only mine. Like, I want others to share in my projects. So, I think all of my projects moving forward, they would all have some type of either interactive, interactivity to them? Or some means of crowd-based engagement."

The long term relationship stands in contrast to the short term relationship that occurs in many online financial transactions, however it is consistent with many online communities that are not focused on financial transactions, such as online discussion communities [13].

Creators: Receive Validation

Initial evidence suggests that a creator's online validation increases perceptions of ability. People's beliefs in their ability increase when they have successful experiences and receive public recognition of their success [36]. An informant who sought funds for a youth photography workshop documenting neighborhood improvements commented on the effect of crowdfunding on his confidence to complete the project:

"I feel much more confident about my ability to do it [his project]"

An informant describes her experience before launching her project and how her confidence increased through online conversation.

"You sort of wonder if people are going to like you and like your research, and so I definitely got more confident once people were clearly interested in it and clearly engaging in the dialogue and supporting me financially."

A founder of RocketHub describes how validation occurs. Funders seek funds from a community of people who care not just about the project, but about the individual's success. The founder explains:

"You are embedding yourself in an active community...you are being validated...Friends and families become evangelists for you...these are completely normal people [creators] and they are working way outside their comfort zone...With crowdfunding, you are allowing people to do something...You have people saying, I believe in you."

Online validation supports perceptions of ability and pushes people to expand capability. This finding is consistent with social cognitive theory, which suggests that people build beliefs in their ability through social interactions [36]. This finding is supported by prior research in online communities, which finds that people engage in these communities to build self-esteem [22].

Creators: Replicate Successful Experience of Others

Initial findings suggest that people participate in crowdfunding because they want to replicate the success of others [37]. An informant describes how her project success helped encourage another creator to pursue crowdfunding:

"There's a fellow archeologist that I've never met, but she just started a new RocketHub project, and so she's in the process of funding, and she claimed to be inspired by me."

Another informant spreads out his successful Kickstarter experience to people he knows after he launched a project, and several people got motivated and started to follow along and participate in crowdfunding as a creator:

"After I did this Kickstarter fundraising, and it was successful...a number of people I know started their own Kickstarter projects. I think, I kind of, you know motivate some people to try it themselves."

Successful experiences can be replicated among people through social proof. Beyond establishing general relationships within the online community, creators not only generate more interest among people but also show them how to become a creator recognized by the larger online community through doing. Seeing other creators succeed in launching a project online provides social proof for anyone who wants to get started and become a creator on crowdfunding platforms.

While these initial findings are consistent with prior literature on motivations for engaging in online communities [11], this study offers a new perspective. For example, our initial findings suggest that people engage in crowdfunding when they see others do it. Social proof describes this phenomenon of people behaving in ways that they see others behaving. In experimental studies, Cialdini finds that when confederates look up into the sky, participants will look up into the sky to see what they are seeing. Seeing others provides social proof for one's both simple and complex tasks [38], such as deciding to participate in crowdfunding. When watching similar others engaging in a task, people are also likely to gain confidence in their own ability to complete the task. Such vicarious learning [37][36] allows people to engage in new tasks which they have not experienced before.

Creators: Expands Awareness of Work through Social Media

Initial findings suggest that creators were motivated to participate in crowdfunding because it expanded their awareness through social media. An anthropologist who used RocketHub to fund her research on ancient Roman skeletons, described being motivated to not only share her work publically but engage in a dialogue about her work.

"I've gotten dozens of emails from people around the world who are really interested in the project, and who want to help on the scientific end or telling their friends and family. A documentary TV producer contacted me... these are

things that don't normally happen if you just have a grant proposal, or you have an article in the journal, you know, that maybe nobody reads. And so putting it out to the public um has been really, really great for me...[My project] was picked up on Twitter by a British science journalist, and so he pitched it to CNN, and then CNN covered it and Forbes covered it and then everything just went crazy after that... I really didn't expect this... I'm really excited that people are just so, so excited about this project that they're willing to give me \$20 or \$50 or \$1000."

In addition to the online communication about her work, the monetary gifts confirms that awareness of her work is spreading.

Participation also influenced her online profile. She commented:

"I've been communicating with people through Twitter, I've gained a bunch of new Twitter followers, a bunch of new G+ followers...I put up a website with a blog, and people can comment on the blog...I wanted to engage the public in a little more of a dialogue."

Funders: Seek Rewards

While creators seek funds, funders seek rewards, often in the form of tangible products and/or services. A funder who funded an iPad accessory noted:

"I like to buy things that I can play with."

Funders refer to the transaction as "buying," "getting," "giving." A funder who contributed funds to a project that employed local women in a Chilean community commented:

"I like that I get something sent to me. I know it's small, but like, I enjoyed getting a postcard and a CD...I'm looking forward to getting a DVD if the project actually comes to fruition."

This funder anticipates getting a reward, a transaction that is significantly longer than the typical consumer purchase transaction, which occurs in the online market place, such as on Amazon or in a brick and mortar store. The transaction described above resembles the funding process of the 12th studio album released by a British rock band called Marillion in 2001. After Marillion successfully raised \$60,000 from their fans to finance their US tour, it turned to their fans to finance the making of an album called *Anoraknophobia* [38]. Fans were asked to pre-order the album through the website before it was even recorded. It is an unprecedented and successful activity appearing in the music industry, with 12,674 albums preordered in total by more than 12,500 fans.

A funder who contributed funds to a documentary film project about the design of cities noted:

"I gave them 10 dollars...10 dollars is a high definition download of the film when it comes out. So, I was like, I'm not going to give them 5 dollars, I'm going to give them 10

dollars because 5 more dollars will give me a high definition download of this film. Great. Yea, I was like, that's worth it."

Funders consistently reported being motivated to give to get the product first or get a limited edition of the work.

A funder who supported a film commented:

"I want to see [the film] right when it's out. So, instead of giving \$10, I gave \$25."

Initial evidence suggests that funders are aware of the exchange of value. Further, they are disappointed when funds are not used to produce rewards directly related to the project. A funder who contributed funds to a weather prediction app noted:

"Don't spend that money on making t-shirts, spend it on building software...I want to see, like, I know that my money is being used well."

Alternatively, another funder noted the sense of security she felt by giving money through Kickstarter, which has an all or nothing funding model.

"There's a security to knowing that if the goal isn't met, my money doesn't just get wasted."

Consistent with previous research, people are motivated to engage in crowdfunding to raise funds [7], however, to our knowledge researchers have yet to consider the democratic process of fundraising as a motivating factor. The words which funders use to describe the transactions ("giving," "getting," and "buying") suggest they that crowdfunding is motivated by both consumer as well as philanthropic behavior.

Funder: Support Creators and Causes

Initial data suggests that participating on a crowdfunding platform can support creators and causes by confirming values. An informant noted:

"It feels like you're creating value and getting something in return."

A serial funder on Kickstarter who tends to fund tech projects because he likes the idea and because he wants to support people who are seeking alternative ways of raising funds to maintain creative control commented:

"I fund an idea that I think is really neat, but I also really like the idea of people being able to get off the ground without needing to buy into a big giant corporate structure, and I like the way that people put the ideas they want out instead of having to compromise those ideas in order to get their product out."

An informant described how she learned about the project through blog entries and wanted to help the creator, a friends' brother, meet his goal.

"I read some of their blog entries and they were fine...it's Graham's brother, I'll just like give him some money. Like,

that will be nice...I think they were pretty close to their goal, but they hadn't quite reached it at that point, and I was like, I think I'll give them ten dollars."

While many funders reported supporting friends, others were motivated to support causes. When asked about her motivation to fund projects, an informant described wanting to

"seek design to create social impact...My goal is to be as supportive of these initiatives as possible....from an identity standpoint, that's something that I would want to be associated with."

This initial evidence suggests that funders are motivated to connect and support others in their social network by helping them meet their goals.

Consistent with prior marketing research, identity influences what actions people take and why they give [27]. People support efforts that are consistent with their identity – in this case the identity of helping others and supporting causes. In this way, crowdfunding influences the type of ideas that are realized, allowing for smaller niche markets.

Funder: Engage and Contribute to a Trusting and Creative Community

Initial evidence suggests that funders participate in crowdfunding to engage in a community. A contributor to a Kickstarter campaign noted:

"From an emotional standpoint, my goal is to be a part of this community of creatives."

A senior executive at a crowdfunding platform noted:

"The way this model works is that people generally feel like they are involved or engaged in the project throughout the duration, and they give people opportunity to be involved in something that they maybe otherwise wouldn't have the opportunity to be involved in, so just to be a part of something is what really motivates people in those cases."

A serial funder who tends to support film and community work noted the difference between the crowdfunding community of which she is a part and the other creative communities.

"I think in other domains....people could have a tendency to feel competitive with people they are doing something similar. But, what I think what's unique about this space [crowdfunding], is people feel more collaborative, so I feel more like funding these types of projects as an act of good will, and say like. hey you guys are doing great stuff. I think we all need as much support as possible, and so I just wanted to be a part of that uplifting force."

This finding is consistent with research for motivations for engaging in online communities [13].

DISCUSSION

To date, crowdfunding has been the purview of economists and marketing researchers who research how people buy

and sell products, services, and rewards to the crowd online [39]. This study is one of the first studies to examine crowdfunding from an HCI perspective – specifically from a motivational perspective and looking at both the creator and the funder.

Creators are motivated to participate to raise funds, receive validation, connect with others, replicate successful experiences of others, and expand awareness of work through social media. Funders are motivated to participate in order to seek rewards, support creators and causes, and strengthen connections with people in their social networks.

The study builds on established work research in online communities but incorporates a new element which online communities do not always include: the exchange of money for product, services, or experiences. Our initial findings suggest that funders build efficacy in their ability to crowdfund. The efficacy is directed toward the specific task of crowdfunding. This is consistent with Bandura's social cognitive framework [37], which suggests that people build competence through mastery experiences in a specific task. Initial evidence suggests that people become funders after watching similar others succeed at crowdfunding. They build further competence when completing the task for themselves.

Initial data analysis also reveals motivational affordances of the online platform that satisfy motivational needs. Platforms that satisfy these motivational needs may ultimately encourage a more diverse group of people to launch their ideas, compared to platforms that do not satisfy these motivational needs. Additionally, funders and creators may also support each other's motivational needs. Expectations for effective communication may increase over time as funders become more sophisticated and less forgiving of a creator's novice business skills. Additionally, with more participation, new models of sorting and prioritizing opportunities for funders may help to direct individuals with different identities, defined as traits, characteristics, and goals [40]. Research suggests that such identities are malleable and context sensitive and influence what actions people take to help people make sense of the world. Understanding identity within the context of crowdfunding is important to ongoing engagement and contributes to what we are calling *motivational crowdwork*, or the investigation of motivation as it relates to online task outsourcing.

Since initial data analysis suggests that the design influences motivation, platform providers could consider how the design of the site influences creator and funder participation. Designers of the platform could do A/B testing to test the motivational affordances of particular design features.

LIMITATIONS

In this study, we chose to focus on creators and funders and use a snowballing technique to gather participants. As successful creators and funders tend to know other

successful creators and funders, we are finding it more difficult to identify people who created and funded projects, which were not successfully funded. We feel this data is critical for understanding motivations for participation and will work directly with our contacts with executives at the crowdfunding platforms to identify such people. Additionally, we acknowledge that motivations for participations could be influenced by the time at which we interview people. People who have funded a project and received their reward may report different motivations than people who have funded a project but not yet received their reward.

Our informants are restricted to participating in one of three crowdfunding platforms. We chose these platforms because they are the three most popular platforms for “creative work”. However, there are additional crowdfunding platforms. It is possible that people who participate on other smaller platforms have different interests and expertise and therefore are motivated to participate in these platforms for different reasons. However, research needs to be done to understand these motivations.

FUTURE RESEARCH

Our initial findings suggest a number of areas for future research. First, we plan to collect more data and do a deeper analysis of motivations. In this analysis, we will examine factors that may influence motivations, such as domains and professional expertise. An accomplished musician, for example, who has experience producing albums and has relied on the crowd, in a sense, to fund his work may have different motivations than a novice product designer, who has pitched one idea to a venture capitalist and was rejected. Additionally, the size of the creator's social network, their online presence, and funding level may influence motivation to participate. For example, a creator who requests \$5,000 from his small social network may have different motivations than a creator who requests \$100,000 and tweets regularly with her large social network. Additionally, future work will examine how expertise of the creator and project type, social network, and online presence influence motivations.

Second, we plan to investigate how the same individual can participate in three distinct roles including observer, funder, and creator. While individuals initiate participation in crowdfunding in one role, initial evidence suggests that they transition between roles. For example, an individual may start as an observer, checking on Kickstarter regularly to learn about new projects and gain inspiration. After weeks of observing, she may decide to launch her project. After a successful launch, she may see a project launched by a person who funded her and may chose to reciprocate support. Future work will show how individuals engage in different roles and how the extent of participation in each role informs future choices.

Third, we will consider how participants learn innovation skills through crowdfunding platforms. Innovation leads to

economic and social prosperity and we need people to have the skills, attitudes, and expertise necessary to innovate. Problems with this traditional model include the fact that many aspiring young individuals cannot afford business training, and even for those that can, the artificial constraints of classroom settings often fail to recreate the realities of the business world. There is a need for accessible and practical approaches to innovation education. The Web offers an unprecedented opportunity to learn about innovation or the development and implementation of novel and useful ideas [41]. The web and online crowdfunding platforms offer a key source of feedback that helps everyday people learn about the novelty and usefulness of their ideas and provides a platform for implementation. Posting a project on a crowdfunding platform requires creators to address a general audience. An informant explains how posting on a crowdfunding platform required her to learn how to frame her work for different audiences to attract attention:

"I really think it helped me communicate with the public and get them interested in my work..."

To communicate this work, this informant had to learn a new form of communication in which she did not have prior experience:

"I've never made a video before for my research...it was really a lot of fun, so I really enjoyed that. That was not something I had ever done before."

Another informant noted:

"I learned all of those tips about, you know, keeping things very progressive sounding, and keeping the vocabulary very positive vs. desperate."

Creators learned new ways of communicating and effective communication dialogue to engage their funding community. Informants were motivated to learn new ways of communicating in order to reach a larger audience.

Crowdfunding can possibly enable learning through responses to funding requests, web analytics, qualitative feedback, and tutorials on how to make funding pitches, fulfill orders, etc. This work will explore how people learn by design by taking on design challenges, learning principles through participation, and getting feedback through regular and public interaction [42].

Fourth, we will consider the individual strategies people use to engage in crowdfunding. Initial evidence suggests that creators and funders extensively rely on social media to spread awareness of activity and promote engagement. While creators primarily want to engage with the crowd, one informant described designing his page on Kickstarter to minimize the number of comments when he failed to

meet his deadline and felt overwhelmed by the responsibility. Creators also describe strategies for fulfilling orders on time such as hiring people to work for little to no money as one creator did who hired teenagers to wrap and send packages of his books to funders because he had underestimated the time it would take to fulfill the orders.

Fifth, we will consider design principles to enhance creator and funder participation on crowdfunding platforms to ensure broader participation and encourage a variety of projects to get out into the world. We will possibly investigate including recommendation features, offering users selective choices and alternative mechanisms for financial and support, simplifying messaging, and identifying as a full service provider

CONCLUSION

As HCI researchers, we must remember that motivations are a fundamental part of what makes us human. Since HCI is a humanistic field, it behooves us to consider the motivational states of the user in relation to the technology of interest. Doing so will help us design better technologies that enhance performance and open doors to many new research areas.

Computer-mediated crowdfunding is a relatively new area of research in HCI, and we believe it is particularly amenable to research on motivation. Importantly, participation may have a significant effect on the economy by encouraging a more diverse set of people to start small entrepreneurial ventures, influencing the type of ideas that are introduced into the world, and the use disposable income to support these ventures. As HCI researchers explore this phenomenon in new ways, crowdfunding platforms can be improved in ways that benefit the creator, funder, and society at large.

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