

## Association for Information Systems AIS Electronic Library (AISeL)

---

PACIS 2018 Proceedings

Pacific Asia Conference on Information Systems  
(PACIS)

---

6-26-2018

# Reducing Uncertainty in Charitable Crowdfunding

Deserina Sulaeman

*Singapore Management University*, [deserinas.2015@phdis.smu.edu.sg](mailto:deserinas.2015@phdis.smu.edu.sg)

Mei Lin

*Singapore Management University*, [mli@smu.edu.sg](mailto:mli@smu.edu.sg)

Follow this and additional works at: <https://aisel.aisnet.org/pacis2018>

---

### Recommended Citation

Sulaeman, Deserina and Lin, Mei, "Reducing Uncertainty in Charitable Crowdfunding" (2018). *PACIS 2018 Proceedings*. 134.  
<https://aisel.aisnet.org/pacis2018/134>

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2018 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# Reducing Uncertainty in Charitable Crowdfunding

*Research-in-Progress*

**Deserina Sulaeman**

School of Information Systems  
Singapore Management University  
deserinas.2015@phdis.smu.edu.sg

**Mei Lin**

School of Information Systems  
Singapore Management University  
mlin@smu.edu.sg

## Abstract

*Donors on charitable crowdfunding platforms do not directly consume the benefits of their donations, making it difficult to assess whether fundraisers follow through on their promised benefits. This difficulty in monitoring the actions of charitable fundraisers increases the importance of ex-ante assessment. This study examines whether potential donors rely on the quality signals embedded in the campaign's page when deciding the direction of their contributions. Using data on charitable campaigns from a charity-focused crowdfunding platform, GoFundMe, this study finds that campaigns with more thorough descriptions written in a more complex writing style receive more donations from more donors. Additionally, more ambitious projects with higher funding goals also receive more donations. These patterns suggest that providing these quality signals can reduce the uncertainty faced by potential donors.*

**Keywords:** Uncertainty, charitable, crowdfunding, fundraising, donation, natural disasters

## Introduction

Crowdfunding has transformed how charitable fundraisers solicit funds from potential donors to help those in need (Gomber et al. 2018). Charitable crowdfunding platforms enable fundraisers, even those with no prior experience in organizing charitable projects, to reach a wider set of potential donors. The popularity of charitable fundraising through crowdfunding has been growing rapidly in recent years. For instance, fundraisers on GoFundMe, one of the largest crowdfunding platforms in the world and the focus of this empirical study, have raised over US\$ 5 billion since 2010 ("About Us" 2018). This development warrants close examinations of fundraising activities on these platforms.

This study examines factors that can reduce uncertainty faced by potential donors on these charitable crowdfunding platforms. Potential donors in charitable crowdfunding platforms are likely to have significant difficulty in identifying which campaigns to donate to due to the uncertainty regarding the quality of each fundraiser's project output (will be called benefits, henceforth). As described by Knight (1921), uncertainty stems from incomplete knowledge. In our setting, uncertainty faced by potential donors stems from the incomplete information regarding (1) fundraisers' ability to deliver on their promises and (2) the quality of benefits delivered to the beneficiaries. It is difficult for potential donors to assess fundraisers' ability to deliver on their promises because many fundraisers on these platforms are first time fundraisers, whereas repeat fundraisers are quite rare. It is also difficult for potential donors to assess the quality of the benefits delivered to the beneficiaries because donors do not directly consume the benefits from their donations in charitable setting.

A study by Pavlou and Gefen (2004) found that buyers' protection against fraudulent sellers provided by e-commerce platforms can reduce buyers' uncertainty in online markets. Charitable crowdfunding

platforms offer similar protections for potential donors. For example, GoFundMe started offering donors a money back guarantee feature in 2016 which allows donors to receive refund in the case of scams. This type of protections can reduce the uncertainty faced by potential donors on charitable crowdfunding platforms. However, this only eliminates the most egregious cases and still does not cover cases where the fundraisers cannot fully deliver on their promises despite their best intentions. This study focuses on the campaign-level factors that can reduce uncertainty faced by potential donors which ultimately affect the amount of donations raised by these campaigns.

Existing studies on crowdfunding have documented various ways to reduce uncertainty faced by project funders on crowdfunding platforms (e.g., Belleflamme et al. 2015, Burtch et al. 2013, and Mollick 2014). Applying the findings of these studies directly to the charitable crowdfunding context does not seem appropriate. While existing studies in non-charitable crowdfunding provide a valuable basis for understanding the signals used by funders to help reduce uncertainty, charitable crowdfunding projects are significantly different than non-charitable ones. An important difference between charitable and non-charitable crowdfunding projects is the inability of potential donors to do ex-post assessment of the benefits because these benefits are typically delivered directly to the beneficiaries. As such, it is difficult for donors to assess the quality of these benefits because they do not directly consume such benefits. This difference could result in different effects of quality signals on the outcomes of campaigns in charitable vs. non-charitable crowdfunding platforms.

This study focuses on charitable crowdfunding campaigns aiming to help victims of natural disaster events. This focus has two benefits. First, it allows for comparisons with traditional charitable fundraising. In the case of natural disaster reliefs, fundraisers in crowdfunding platforms play a similar role to traditional charitable organizations: they act as middlemen who collect donations and then distribute the benefits to the ultimate beneficiaries. Second, by focusing on campaigns related to natural disaster events, we implicitly control for the (potentially large) variation in the worthiness of causes supported by various campaigns on charitable crowdfunding platforms.<sup>1</sup> This allows for a clearer inference regarding other factors that can affect the amount of donations raised by each campaign. Also important to note that our analyses utilize a dataset from online one platform. This precludes an analysis of platform-level characteristics that influence the level of uncertainty faced by potential donors.

This study finds that donors look for quality signals embedded in campaigns' funding goals and descriptions to reduce uncertainty. First, charitable crowdfunding campaigns with higher funding goals receive higher total amounts of donations from more donors. In a keep-it-all funding model utilized by GoFundMe, fundraisers are unlikely to strategically set the funding goals to maximize the likelihood that their projects are funded because campaigns are funded regardless of whether the initial funding goals were fulfilled. As such, ambitious projects with higher funding goals reflect higher levels of fundraisers' commitment in helping those in need; such fundraisers are likely to be viewed by potential donors as of better quality.

Second, higher SMOG (Simple Measure of Gobbledygook) scores of the campaign descriptions receive higher total amounts of donations from more donors. The SMOG formula assigns a higher score for a more complex text that requires higher reader's education level to comprehend, potentially resulting in the fundraiser being perceived as a more competent writer and by extension a more competent fundraiser. This can reduce potential donors' uncertainty regarding the fundraiser's ability to deliver the promised benefits. Additionally, we also find that for projects with low funding goals (i.e., below US\$10,000), a more complex writing style can help mitigate the negative effect of lower funding goals described above.

Third, this study finds that fewer spelling errors lead to higher total amounts of donations received and more donors contributing. This result is consistent with potential donors associating campaign descriptions afflicted by many spelling errors with low campaign quality as these errors could easily be avoided using spell-checking software and by performing basic proofreading. Fourth, this study finds

---

<sup>1</sup> Some campaigns on GoFundMe support causes that are not typically associated with charities, such as funding a vacation for an individual. An example of such campaign is <https://www.gofundme.com/AmieeVacationFunds>.

that campaigns with longer descriptions receive more from more donors. Longer descriptions are likely to contain detailed project information which can help reduce uncertainty faced by potential donors.

Lastly, both herding and crowding out effects are observed in this context. In the absence of complete information regarding the fundraisers and their projects, potential donors seem to follow the actions of other donors when deciding the direction of their contributions. However, potential donors are also less likely to contribute to campaigns that have reached their funding goals. Most importantly, this study finds that even with herding behavior accounted for, the effects of quality signals remain robust

## **Hypotheses Development**

Buyers in online markets face substantial difficulty in identifying products to purchase and sellers to transact with (Dimoka et al. 2012). This difficulty is due to the uncertainty stemming from the incomplete information about products and sellers. This condition is exacerbated in the charitable crowdfunding setting in two ways. First, donors do not directly consume the benefits provided by fundraisers, making it difficult to assess the quality of benefits delivered to the ultimate beneficiaries. Second, many fundraisers on charitable crowdfunding platforms are first time fundraisers, whereas repeat fundraisers are quite rare. Therefore, it is difficult for potential donors to assess fundraisers' ability in fulfilling their promises. Both uncertainty in the quality of the campaigns' outputs and the ability of the fundraisers in delivering those outputs make it necessary for potential donors in charitable crowdfunding platforms to look for signals that can help them in reducing these types of uncertainty.

A meta study by Riketta (2002) documented a positive correlation between commitment and performance in altruistic and voluntary settings. In our setting, a fundraiser's commitment to the campaign can be reflected by the campaign funding goal she sets. Campaign's funding goal can also reflect the type of project the fundraiser is raising money for. A high value project (i.e., a project with a higher funding goal) is likely to require more commitment from the fundraiser and thus indirectly reflect the fundraiser's commitment to the cause he/she supports. In a keep-it-all funding model, like the one used by GoFundMe, campaigns are funded regardless of whether the initial funding goals were fulfilled. As each fundraiser does not have a strategic incentive to set the funding goal to maximize the likelihood that the project is funded, the funding goal is likely to capture the fundraiser's aspired levels of impacts for the ultimate beneficiaries. Ambitious projects with higher funding goals are likely to be more challenging to carry out and would require more effort and time to deliver, reflecting the fundraisers' commitment in helping those in need. Therefore, we expect:

**Hypothesis 1A:** *A higher campaign's funding goal leads to a higher total amount of donations.*

**Hypothesis 1B:** *A higher campaign's funding goal attracts a higher number of donors to the project.*

In charitable campaigns, the quality of benefits delivered to the end beneficiaries depends on the ability of fundraisers to deliver the promised benefits. Chen et al. (2009) documented that investors evaluating new ventures use the quality of the entrepreneurs' pitches as a signal. A similar function is likely to be played by campaign descriptions in the charitable crowdfunding setting. It is possible that fundraisers in charitable crowdfunding setting do their best to represent their project, potentially eliminating the variation in the writing quality of the each project description. However, this is not the case based on our observation of our dataset. The quality of the written project description appears to vary from one project to another. For example, the standard deviation of the number of spelling errors in a campaign description is 2.57 with many descriptions containing no errors, but some descriptions contain more than 10 errors. It is also important to note that our proxies for writing quality are not highly correlated with the funding goal (i.e., their correlation coefficients are less than 0.05 in absolute value) indicating that not all well-written descriptions belong to ambitious projects with high funding goals.

We expect campaigns whose description is well written are likely to be viewed as higher quality for two reasons: (1) fundraisers who can write better are viewed as more competent and (2) the efforts spent by fundraisers to craft good campaigns descriptions are viewed as a signal of commitment to their projects.

**Hypothesis 2A:** *A well described campaign leads to a higher total amount of donations.*

**Hypothesis 2B:** *A well described campaign attracts a higher number of donors to the project.*

In the absence of full information, individuals often follow preceding decisions made by other individuals. This prevalent pattern is described as rational herding (Bikhchandani et al. 1992), and has been documented in various settings, e.g., microloan (Zhang and Liu 2012). Potential donors on charitable crowdfunding platforms could also look at the behavior of preceding donors as a signal for quality. Specifically, potential donors may look at the amount of funds that a project has raised thus far as a signal of project's quality generated collectively by other donors. We therefore examine whether (1) rational herding is observed in the charitable crowdfunding setting, and (2) the effects of quality signals as hypothesized above remain robust in the presence of such herding behavior.

## Empirical Model

The equation below shows the empirical model used in this study to test the hypotheses above. For each campaign  $i$ , we employ two measures of campaign's *Outcome*: (1) the total amount of donations raised by campaign  $i$  (in US\$), (2) the number of donors contributing to campaign  $i$ . This model is estimated separately for the two outcome variables using Ordinary Least Square (OLS) method. Unlike in typical crowdfunding study, funding goal fulfillment is not utilized as a measure of campaigns' outcome because fundraisers on GoFundMe receive the full amounts of donations (less fees) regardless of whether their initial funding goals are fulfilled.

$$\ln(\text{Outcome})_i = \alpha_1 * \ln(\text{FundGoal})_i + \alpha_2 * \ln(\text{WriteStyle})_i + \alpha_3 * \ln(\text{GramErr})_i + \alpha_4 * \ln(\text{SpellErr})_i \\ + \alpha_5 * \ln(\text{Words})_i + B * X_i + \mu_1 * \text{Kumamoto}_i + \mu_2 * \text{Nepal}_i + \mu_3 * \text{Sandy}_i \\ + \mu_4 * \text{Ecuador}_i + \varepsilon_i$$

Five independent variable of interest are included in the model. *FundGoal* refers to the campaign funding goal. *WriteStyle* represents the complexity of the writing style used in the campaign description. This study uses the SMOG score introduced by McLaughlin (1969) as a measure for how complex the writing style of the campaign descriptions are.<sup>2</sup> The SMOG formula assigns a higher score for texts that contain a higher number of *polysyllable words*. Text with a higher SMOG grade generally requires a higher reader's education level to comprehend. Additionally, the usage of longer words is also associated with a more precise vocabulary that can help convey the meaning of a text more clearly (McLaughlin 1969). *GramErr* and *SpellErr* refer to the number of grammatical and spelling errors, respectively, in campaign descriptions. *Words* refers to the number of words in the campaign description, i.e., the length of the description.

The model also includes a vector of campaign level control variables denoted by  $X_i$ . First, a sentiment index is included to control for the emotional tone in the campaign descriptions because the emotional tone used in solicitation messages can affect donors' decisions to give (Chang and Lee 2009).<sup>3</sup> Second, the number of the fundraiser's online friends is included to control for the effect of the fundraiser's social network size on the success of his fundraising campaign (Lin et al. 2013). Third, the model includes a binary indicator variable indicating whether the fundraisers are located in the areas directly affected by the natural disaster associated with their campaigns. This location indicator is included to control for the location effect previously documented by Lin and Viswanathan (2016) and Mollick (2014). Finally, an indicator variable indicating whether the campaign's page has at least one video is included in the model to control for the effect of video on the outcome of a campaign as previously documented by Mollick (2014). The model also includes event dummy variables to control for the heterogeneity across the four events. An intercept is not included as it is subsumed by the event dummies.  $i$  is the index for campaign. Lastly,  $\varepsilon$  is the residuals from the regression. All continuous numerical variables are logarithmically transformed to reduce their skewness.

The model above can be extended to test the robustness of quality signals effects in the presence of herding and crowding out effects. In the extended model presented below, campaign' outcome is

<sup>2</sup> The SMOG scores are calculated using: [https://www.online-utility.org/english/readability\\_test\\_and\\_improve.jsp](https://www.online-utility.org/english/readability_test_and_improve.jsp)

<sup>3</sup> The sentiment index is calculated by counting the number of positive words minus the number of negative words. National Research Council of Canada (NRC) emotion lexicon dictionary (available at <http://saifmohammad.com/WebPages/NRC-Emotion-Lexicon.htm>) is used to count the number of positive versus negative affect words.

separated into two categories: (1) early outcome (*InitOutcome*) and (2) later outcome (*LaterOutcome*). The initial outcome of the campaign is included to capture the herding effect, while a dummy variable indicating whether the funding goal was already met in the initial fundraising period is added to capture the crowding out effect posited by Ribar and Wilhelm (2002).

$$\begin{aligned} \ln(\text{LaterOutcome})_i = & \omega_1 * \ln(\text{InitOutcome})_i + \omega_2 * \text{InitGoalMet}_i + \alpha_1 * \ln(\text{FundGoal})_i \\ & + \alpha_3 * \ln(\text{GramErr})_i + \alpha_4 * \ln(\text{SpellErr})_i + \alpha_5 * \ln(\text{Words})_i + B * X_i \\ & + \mu_1 * \text{Kumamoto}_i + \mu_2 * \text{Nepal}_i + \mu_3 * \text{Sandy}_i + \mu_4 * \text{Ecuador}_i + \varepsilon_i \end{aligned}$$

## Data Description

This study utilizes Python codes to collect publicly available data from GoFundMe's website, www.gofundme.com, in May 2016. The dataset contains a total of 1,078 unique charitable campaigns to help victims of four major natural disasters: Hurricane Sandy (October 2012), Nepal (April 2015), Kumamoto earthquake (April 2016), and Ecuador earthquake (April 2016). These four events saw the highest numbers of natural disaster-related fundraising campaigns on GoFundMe at the time of data collection. The campaigns associated with these four events raised a total of US\$ 7.68 million in donations. The most successful campaign in this sample raised US\$ 195,031. The mean total donations per campaign is US\$ 7,124 and the median total donations per campaign is US\$ 4,610.

The expanded model uses a subset of the dataset that includes only campaigns that started within the first 10 days following the corresponding natural disaster event along with additional donor contribution information. The donation time stamp is at monthly frequency, which do not allow for precise identifications of the contribution time, but still allow for categorization of donations into those received in the "initial" period and those received in the subsequent "later" period.<sup>4</sup>

Seventy six percent of the campaigns in the original sample (821 out of 1,078 campaigns) started within 10 days of the corresponding event. In this subset of campaigns, donations received in the "initial" and "later" period (i.e., about 45 days) accounted for 89% of the total donations received by these campaigns (US\$5.6 Million of the total of US\$6.3 Million). This donation pattern reflects the urgency of natural disaster relief efforts as well as the short attention window given to natural disaster events.

## Results

Table 1 shows the estimates for the basic model. Each column reports the parameter estimates for each measure of campaign's outcome: (1) the total amount of donations and (2) the number of donors. Control variables and event dummies are included in all regressions ran in this study, but their estimates are suppressed due to space constraint.

Table 1 shows that the campaign goal result is consistent with Hypotheses 1A and 1B. As GoFundMe employs a keep-it-all funding model, campaigns are funded regardless of whether the funding goals were reached. In such setting, each fundraiser does not have strategic incentive to set the funding goal to maximize the likelihood that the project is funded. As such, the funding goal is likely to capture the fundraiser's aspired levels of impact for the ultimate beneficiaries. Since more ambitious projects with higher funding goals are likely to require more efforts and time to organize, fundraisers who set higher goals would be perceived as more committed to helping others in need and therefore more likely to perform better than those who set lower goals. This result is also consistent with Ribar and Wilhelm's

---

<sup>4</sup> The "initial" period of donations ranges from 11 days to 16 days after the event depending on which event is associated with the campaign. This range of initial period is used because the imprecision of the donation time stamps. The length of the initial period associated with each of the event depends on when the event occurred and when the data was collected. For campaigns associated with the hurricane Sandy, the initial period is the first 13 days after hurricane Sandy hit New York and New Jersey. For campaigns associated with the Nepal earthquake, the initial period is the first 16 days after the earthquake hit Nepal. For the campaigns associated with the Kumamoto and Ecuador earthquakes, the initial period is the first 11 days after the earthquakes hit the city of Kumamoto in Japan, and the town of Muisne and Pedernales in Ecuador respectively. The "later" period is the month immediately following the "initial" period.

model (2002) on traditional charitable giving, in which altruistic donors maximize their utilities when they contribute to charities that provide higher impact for the end beneficiaries.

**Table 1. Quality Signal Effects on the Outcome of Charitable Crowdfunding Campaigns**

	1		2	
	ln( <i>DonationAmt</i> )		ln( <i>Donors</i> )	
	Coef.	(SE)	Coef.	(SE)
ln( <i>FundGoal</i> )	0.22***	(0.04)	0.10***	(0.03)
ln( <i>WriteStyle</i> )	0.99***	(0.32)	0.74***	(0.25)
ln( <i>SpellErr</i> )	-0.03**	(0.01)	-0.03**	(0.01)
ln( <i>GramErr</i> )	-0.02	(0.01)	-0.01	(0.01)
ln( <i>Words</i> )	0.42***	(0.08)	0.34***	(0.06)
Adjusted R-square	0.45		0.41	
Note: *p<0.1, **p<0.05, and ***p<0.01. The correlation coefficients of the independent variables included in the regressions are less than 0.5.				

Table 1 also shows that campaign whose descriptions have more complex texts and more precise vocabularies, i.e., those whose descriptions receive higher SMOG scores, receive more donations from more donors. A more complex writing style that that requires a higher reader's education level to comprehend likely reflects a more competent writer and by extension a more competent fundraiser. This perception of competence can reduce potential donors' uncertainty regarding the ability of the fundraisers to deliver on their promises. Furthermore, the use of polysyllable words also is often associated with a more precise vocabulary (McLaughlin 1969). The use of a more precise vocabulary in the campaign description can convey a clearer message to potential donors and reduce uncertainty.

Table 1 also shows that campaigns whose descriptions contain fewer spelling errors receive higher total amounts of donations received and higher numbers of contributing donors. This pattern suggests that potential donors associate campaign descriptions afflicted by many errors with low campaign quality. Those errors suggest that the fundraisers have not spent the efforts and time necessary to describe their projects well. Spelling errors could easily be avoided by performing basic proofreading or merely using a spell-checking software. Lastly, the results show that campaigns with longer descriptions receive higher total amounts of donations from more contributing donors. Longer descriptions are more likely to contain detailed information about the projects which can help reduce uncertainty faced by potential donors. In sum, the results regarding writing quality in Table 1 support Hypotheses 2A and 2B.

We added interaction terms to the basic model to examine the differential effect of writing quality for projects with high vs. low funding goals. Our results show that having descriptions with higher SMOG scores can help mitigate the negative effect of low funding goals (i.e., funding goals of US\$10,000 or lower). This highlights the importance of well written campaign descriptions particularly for campaigns with low funding goal. Fundraisers whose projects are less ambitious should spend more time and efforts to craft the description of their campaigns.

Table 2 reports the parameter estimates for the expanded model that includes herding and crowding out effects. First, we find a positive effect of initial campaign outcome on the outcome in the subsequent period. The first two rows in Table 2 are consistent with a rational herding pattern where donors in later period view the actions of initial donors as a positive signal of quality. Second, we observe a negative effect of successfully meeting the funding goal in the initial period consistent with a crowding out effect. Donors seems to be likely to contribute additional funds to campaigns that have already fulfilled their funding goals. More importantly, our results indicate that even with rational herding and crowding out behaviors accounted for the effects of quality signals – i.e., funding goal, writing style, and number of words – remain robust. This suggests that potential donors do not simply react to the actions of early donors. Potential donors continue to pay attention to the quality signals embedded in the campaign's description and funding goal even when they have the luxury of observing the actions of earlier donors.

**Table 2. Quality Signal Effects with Herding and Crowding Out Effects Accounted For**

	1		2	
	ln(LaterDonAmt)		ln(LaterDonors)	
	Coef.	(SE)	Coef.	(SE)
ln(InitDonAmt)	0.05*	0.03		
ln(InitDonors)			0.05**	0.02
InitGoalMet [dummy]	-2.31***	0.56	-1.70***	0.38
ln(FundGoal)	0.72***	0.13	0.45***	0.09
ln(WriteStyle)	1.68*	0.90	0.99	0.61
ln(SpellErr)	-0.06	0.04	-0.04	0.03
ln(GramErr)	-0.02	0.04	-0.00	0.03
ln(Words)	0.64***	0.24	0.44***	0.16
Adjusted R-square	0.41		0.46	
Note: *p<0.1, **p<0.05, and ***p<0.01. The correlation coefficients of the independent variables included in the regressions are less than 0.5.				

## Conclusion

This study examines factors that can help reduce the uncertainty faced by potential donors when deciding the direction of their contributions on charitable crowdfunding platforms. Our findings suggest that potential donors look for quality signals embedded in the information provided by charitable fundraisers, such as campaign funding goals and the characteristics of campaign descriptions.

Our findings indicate that projects with higher funding goals receive more donations from more donors. This is likely because fundraisers whose projects are more ambitious are seen as more committed to their cause as this type of projects is likely to require more time and efforts to deliver. Our findings also suggest that projects with well-written descriptions (i.e., those with more complex writing style, contain more words and fewer errors) receive more donations from more donors. For fundraisers with less ambitious projects, complex writing style can help mitigate the negative effect of setting lower funding goals. It is important to note that we find the effects of quality signals remain robust even with herding behavior accounted for.

The findings from this study are useful to inform charitable fundraisers on crowdfunding platforms of potential practices that could help reduce uncertainty faced by potential donors. Spending additional time and efforts to craft comprehensive descriptions utilizing more complex writing styles can help in differentiating from other campaigns with similar cause. These quality signals are useful to attract more donations in the initial period of a campaign, which may create a momentum for the campaign in subsequent periods. Moreover, these signals continue to be useful even when potential donors follow the actions of other donors.

We hope to continue to expand this study by conducting further text analytics on the campaign description. Certain keywords in the descriptions may reflect the projects better, therefore, reduce uncertainty faced by potential donors when deciding the direction of their donations. We also hope to continue to expand this study by capturing the dynamics of interactions among fundraisers within the same charitable crowdfunding platform over time. It is likely that these fundraisers compete for potential donors' money. However, the presence of more fundraisers supporting similar causes can potentially bring more potential donors into the platform by raising the awareness of the cause and the platform among potential donors. In order to expand this research agenda in that direction, additional models and dataset are needed.

## References

- Belleflamme, P., Omrani, N., and Peitz, M. 2015. "The Economics of Crowdfunding Platforms," *Information Economics and Policy* (33), pp. 11-28.
- Burch, G., Ghose, A., and Wattal, S. 2013. "An Empirical Examination of the Antecedents and Consequences of Contribution Patterns in Crowd-Funded Markets," *Information Systems Research* (24:3), pp. 499-519.



- Bikhchandani, S., Hirshleifer, D. and Welch, I. 1992. "A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades." *Journal of Political Economy* (100:5), pp. 992-1026.
- Chang, C. and Lee, Y. 2009. "Framing Charity Advertising: Influences of Message Framing, Image Valence, and Temporal Framing on a Charitable Appeal," *Journal of Applied Social Psychology* (39:12), pp. 2910-2935.
- Chen, X., Yao, X., and Kotha, S. 2009. "Entrepreneur Passion And Preparedness In Business Plan Presentations: A Persuasion Analysis of Venture Capitalists' Funding Decisions," *Academy of Management Journal* (52:1), pp. 199-214.
- Dimoka, A., Hong, Y. and Pavlou, P. 2012. "On Product Uncertainty in Online Markets: Theory and Evidence," *MIS Quarterly* (36:2), pp. 395-426.
- Gomber, P., Kauffman, R.J., Parker, C. and Weber, B.W. 2018. "On the Fintech Revolution: Interpreting the Forces of Innovation, Disruption, and Transformation in Financial Services," *Journal of Management Information Systems*, (35:1), pp. 220-265.
- Knight, F.H. 1921. *Risk, Uncertainty and Profit*. Boston: Houghton Mifflin Company.
- Lin, M. and Viswanathan, S. 2016. "Home Bias in Online Investments: An Empirical Study of an Online Crowdfunding Market," *Management Science* (62:5), pp. 1393-1414.
- Lin, M., Prabhala, N. and Viswanathan, S. 2013. "Judging Borrowers by the Company They Keep: Friendship Networks and Information Asymmetry in Online Peer-to-Peer Lending." *Management Science* (59:1), pp. 17-35.
- McLaughlin, H. 1969. "SMOG Grading - A New Readability Formula," *Journal of Reading* (12:8), pp. 639-646.
- Mollick, E. 2014. "The Dynamics of Crowdfunding: An exploratory Study," *Journal of Business Venturing* (29:1), pp. 1-16.
- Pavlou, P.A. and Gefen, D. 2004. "Building Effective Online Marketplaces with Institution-based Trust," *Information Systems Research*, (15:1), pp. 37-59.
- Ribar, D. and Wilhelm, M. 2002. "Altruistic and Joy-of-Giving Motivations in Charitable Behavior," *Journal of Political Economy* (110:2), pp. 425-457.
- Riketta, M. 2002. "Attitudinal Organizational Commitment and Job Performance: A Meta-analysis," *Journal of Organizational Behavior* (23:3), pp. 257-266.
- Zhang, J., and Liu, P. 2012. "Rational Herding in Microloan Markets," *Management Science* (58:5), pp. 892-912.
- "About Us". 2018. *Gofundme.com* (available at <https://www.gofundme.com/about-us>; retrieved February 14, 2018).