ON SLACKTIVISM AND PERCEIVED CRITICAL MASS IN ONLINE CROWDFUNDING CAMPAIGNS FOR PHILANTHROPIC CAUSES

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ABSTRACT

Donations by individuals make up the vast majority of contributions received by nonprofit organizations. The proportion of individual donations coming from crowdfunding has had a steep increasing pattern. While it seems intuitive that sharing these campaigns on social media increases donations, the net effect of such sharing has not been studied. Using data from a major crowdfunding website, and utilizing two econometrics models, it is shown that sharing crowdfunded campaigns on social media actually has a negative effect on donations; a phenomenon known as slacktivism. It is further shown that there is a 'critical mass' beyond which donations increase significantly. These results have important strategic implications for creating awareness about crowdfunding campaigns.

Keywords: Slacktivism; Critical mass; Social media; Crowdfunding

INTRODUCTION

Crowdfunding has been used to collect the necessary funds for various ends, e.g., entrepreneurial projects, donations, etc. In 2014, crowdfunding campaigns collected around $16 billion. A figure that was estimated to be around $34 billion in 2015 [1]. Being online businesses, it is natural for these websites to choose other online businesses as their publicity media. Further, sharing in the social media creates the opportunity to address a huge audience.

On the social media user's side, however, there may not actually be so many benefits. Prior research has shown that in circumstances where a token display of support is possible (e.g., wearing a bracelet for a cause, signing a petition, changing one's Facebook profile picture, and so on), many people actually stop at merely making this superficial contribution and do not take the extra, meaningful step (e.g., actually doing something for a cause, donating actual money, etc.) to help. This phenomenon has come to be known as 'slacktivism' [3] [2] [6] [7]. When a crowdfunding donation campaign is shared on Facebook or Twitter, users who see the campaign have one of two choices: (1) to follow the link to the donation website and potentially contribute to it, and/or (2) to merely re-share or retweet the campaign for others to see. This second effortless step, which also has the advantage of being publicly visible, could lull the user into thinking that s/he has done what is necessary to help. As a result, of all the shares of a given campaign, only a few actually bring about what the campaign makers need; in this case, monetary donations.
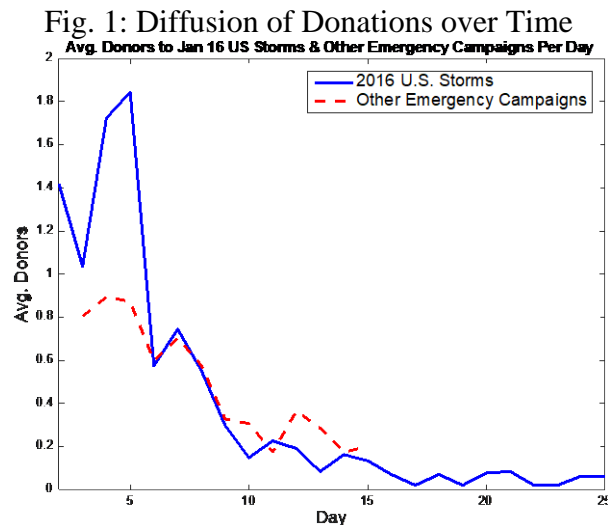
Another potential impediment to the success of crowdfunded donation campaigns is the tendency of people to donate more to campaigns that have already received a minimum amount of donations. Known as the 'critical mass,' this minimum acts as necessary condition for the success of cooperative action [5]. The critical mass phenomenon has been widely observed and studied in the diffusion and adoption of new products. In this domain, critical mass represents a certain number of users of an innovation beyond which the rate of development of that innovation increases dramatically [9].

LITERATURE

In the aftermath of Paris attacks in 2015, Facebook created a feature where users could change their profile pictures to one with the French flag as watermark background. The concern about this feature is over a phenomenon known as *slacktivism* [3]. Intended as a portmanteau word, blending 'slacker' and 'activism,' slacktivism refers to the tendency of individuals to exhibit a relatively costless superficial display of support for a cause, and not engage in more meaningful activities to contribute to it [6] [7].

The term 'critical mass' has its roots in Physics; it is defined as the amount of mass necessary to make a nuclear chain reaction self-sustaining. From Physics, the term found its way to the social sciences, where it is defined as "the threshold of participants or actions that must be crossed before a social movement can exist" [8] [4]. In other words, the critical mass means the few who create the necessary condition for the participation of many others [5].

Interestingly, many online crowdfunded campaigns follow the same course as a new product. As Figure 1 illustrates, the diffusion of campaigns for the U.S. storms that happened in the January of 2016, and some other campaigns observed since their nascency follows a pattern quite similar to that of a diffusion of a new product.

Fig. 1: Diffusion of Donations over Time

Given the similarity, it is expected that there should be a critical mass of donations (donors) beyond which the contributions to a given campaign increase dramatically.

DATA

The data for this research were scraped from a major crowdfunding donation website, dubbed by 'crowfunding.com' to be the number one website in terms of transaction volume in 2014. The website claims they have collected over $2 billion in donations as of June 2016. Individuals can log on to the website and create their own campaigns or donate to the campaigns made by others. Upon creating a campaign, the user can upload a photo or video that depicts the campaign needs or the plight of those in need of money more vividly. Then, the user can add a description to the campaign, explaining the circumstances and reason for the need for help. The total amount of money in each campaign is set by the user.

The campaign, along with a link to it, can be shared on Facebook and Twitter. This sharing can be done by the campaign creator, as well as by anyone who sees the campaign on the website or the social media mentioned. Users who log on to the website directly or through the share links can also like the campaign photo or video on the website. The choice of the amount of donation is with the user who has decided to donate money. The website has a transparent pricing policy for the campaigns and does not charge any extra hidden or processing fees.
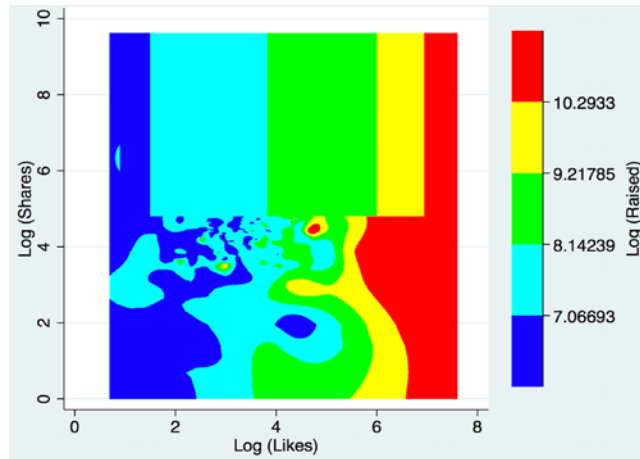
MODEL 1

As mentioned before, many of the users of social media might merely stop at the token display of support for those in need (by merely sharing the campaigns on Facebook and Twitter). The following regression model was run on the static data. It should be noted, again, that the purpose here is to paint a broad picture as to how the aforementioned phenomena fit in the grand scheme of things.

$$AvgRaised_i = \alpha + \beta_1 \times AvgShares_i + \beta_2 \times AvgLikes_i + \beta_3 \times DonorsDummy_i + \epsilon_i$$
$$(1)$$

The variables in this regression are based on their daily net values averaged over the observation window. For instance, the dependent variable, 'AvgRaised', is calculated by taking the mean of the net amount of money raised daily by each campaign in the data. The variables *shares* and *likes* as well as the average of their net daily values were chosen because (1) likes are a very good predictor of the amount and rate of raising money (see Figure 2), and (2) shares are the only social media promotion tool these campaigns have, and they are central to proving the notion of slacktivism in online crowdfunded campaigns.

Figure 2: Contours of Shares and Likes vs the Amount Raised

To provide initial evidence on the existence of critical mass, a dummy variable is defined based on the median split of the total amount of donation to each campaign. A necessary condition for the existence of a critical mass is for the coefficient for this dummy variable to turn out positive.

Table1: Regression Results

Variable	Coefficient	P>|t|	95% Confidence Interval	
Constant	1.33	0.390	-1.71	4.37
AvgShares	-1.48	0.000	-1.82	-1.13
AvgLikes	75.08	0.000	71.41	78.75
DonorsDummy	35.37	0.000	26.51	44.22
Prob > F	0.0000			
R-squred	0.7826			
Adjusted R-squared	0.7820			

As hypothesized, the coefficient of the variable 'AvgShares' is negative. This is because many people chose to merely share these campaigns and did not make meaningful (monetary) contributions to these campaigns. Therefore, of all the shares that a given campaign receives, only a small portion actually translated into monetary donation.

MODEL 2

This model differentiates between three types of campaigns; those with low amounts of donations received, those with moderate levels, and those with high levels. This categorization allows for a better understanding of sharing and donating at different levels.

As the dependent variable, the amount of donations, is categorical, a multinomial probit model is used with the average rate of sharing and donating as independent variables. The independent variables measure the average 'rate' of donations made to different campaigns as well the average rate of sharing of these campaigns. The average rate is calculated by dividing the cumulative amount of donation for each campaign by the number of days it took for those donations to accrue.
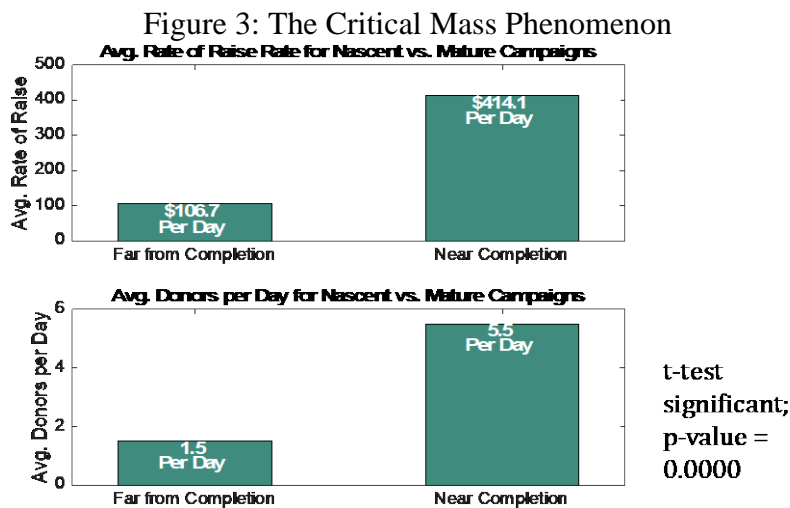
Table 2: Multinomial Probit Model Results

Raise Rate	Variable	Coefficient	P>|z|
	Share Rate	0.01	0.104
Low	Donation Rate	-0.621	0.000
	Constant	0.733	0.000
Medium	Base Outcome		
	Share Rate	-0.008	0.023
High	Donation Rate	0.338	0.000
	Constant	-1.039	0.000
Log Likelihood	-1014		

Table 2 shows that an increase in sharing increases the probability of a given campaign to be in the low range relative to the medium range. An increase in sharing, however, decreases the probability of a given campaign being in the high range relative to the medium range. In other words, extra shares of a campaign increase the likelihood that those campaigns are doing a poor job and decreases the likelihood that the campaigns do a great job.

MODEL 3

To obtain direct evidence for the existence of critical mass, first an average 'rate' variable is defined as the cumulative amount of the corresponding variable divided by the number of the days it took for the amount to accrue [10]. The measure of success for these campaigns is dictated by 'how much money was collected in how much time?' Notice that fledgling campaigns may or may not do worse than mature campaign. That is why it is important to measure a variable that controls for both amount of money and time each campaign has had. A t-test determines the significance of such a difference.

Figure 3: The Critical Mass Phenomenon

As figure 3 shows, campaigns that are near completion do significantly better than those that are far from completion both in terms of the average rate of raise and donors. It is important to note that a campaign that is near completion should not necessarily have a higher rate of raise. This is because such a campaign might have been in existence for a short or long period of time.

DISCUSSION, LIMITATIONS AND FUTURE RESEARCH

The importance of the social media and online promotion tools cannot be overemphasized. A trend that has been observed is that people stop at a mere token display of support for these campaigns by only sharing them on their own pages on the social media. This way, most people only share the information about a need and do not bother to take an extra, more meaningful step in alleviating the need. These so-called slacktivists "contribute", ease their conscience, and get satisfaction by doing the easiest. This calls for two possible strategic directions. First, can the social media come up with something creative which is not as unbinding as sharing? Second, what happens if conventional publicity tools (e.g., TV) are used in conjunction with the social media? The importance of such a question is twofold. Another unfortunate aspect of online crowdfunding campaigns is their similarity to other online cooperative activities (e.g., Groupon) in the necessity for a few minimum people to start doing something before everybody else decides whether or not to chime in. While this phenomenon has been observed and studied a lot in the new product diffusion and adoption literature, it is rather surprising to even exist in the donation domain.

In addition to what was described in the previous section about using the traditional as well as digital promotion tools, one other major source of limitation for the present study comes from the restrictions of collecting secondary data from the Internet. There are some variables of interest that cannot be scraped from a website, yet might be available by the owners of the website. For instance, one of the major concerns in modeling the arrival of the potential donors to the website is how they get there. While some people follow the links that are available when the campaigns are shared on the social media, others log on to the website directly or through the search engines. Such information can only be acquired by asking the website for their data.

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