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Successfully Financing Classical Music Kickstarter Projects

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SUCCESSFULLY FINANCING CLASSICAL MUSIC KICKSTARTER PROJECTS

by
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Abstract

With the rise of technology and finance, crowdfunding has been uprising as a popular method of financing projects. Kickstarter provides an online platform in which anyone with Internet access can upload their own project "pitch" to gain funding for their idea on an all-or-nothing model. My thesis explores financial trends and factors that potentially contribute to a successful Kickstarter campaign within the classical music projects subcategory. I use a logistic regression and the Ordinary Least Squares model to examine a dataset of already successfully funded projects and a second dataset that contains both successfully and unsuccessfully funded projects that were tracked over a period of time. Additionally, I collected text files of the word content on all projects to identify most frequently utilized words for the successful and unsuccessful files.

Controlling for other characteristics, the key findings are that projects with higher target funding levels are both less likely to fund and fund at a lower percentage of the target, projects receiving more comments are more likely to fund, and projects proposed by those that fund other projects are more likely to fund. In addition, certain words are correlated with success or failure. However, since the method of identifying important words used data mining rather than just testing, we cannot predict that these words would increase the likelihood of success in future projects. Due to limited sample size and high correlations among the variables in specifications including both the project characteristics and words, the main results for each set of explanatory variables used separately tend to become statistically insignificant.

Additionally, the funding pattern over time appears not to exhibit the herding behavior found in some asset pricing markets. This is an interesting finding given the highly social nature of funding via Kickstarter.

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1. Introduction

      With the recent rise of crowdfunding, more people have turned to the Internet to bring projects and ideas to life. Home of projects like "COOLEST COOLER: 21st Century Cooler that's Actually Cooler" and "Pebble: E-Paper Watch for iPhone and Android," the Kickstarter crowdfunding website has risen to become the world's largest funding platform for creative projects. With over a billion dollars pledged and 70,000 successfully funded projects, Kickstarter prides itself on its vibrant community of people working together. This has become an important alternative to conventional bank loans, other forms of debt, and equity financing for small projects to obtain financing. In essence, it removes the typical intermediaries between those providing financing and those receiving it. But what makes a successful campaign?

      This research is based on a sample of 108 Kickstarter projects from campaigns specifically in the music category. 42 of these projects were tracked on a daily basis over the course of their campaigns during December 2014 – March 2015, while the rest are a sample of closed, successful projects. I focus on campaigns related to classical music overall and also subcategories for group type, music period, media type, and audio recording. I identify a set of descriptive variables related to the projects with the aim of explaining whether projects successfully fund and the level of funding relative to the target amount set in the project description.

      The subsample of projects tracked daily is especially useful for two reasons. First, we are unable to observe unsuccessful, closed projects on the Kickstarter website, as these projects are removed when they fail. Hence to procure a sample of failed projects, it is necessary to observe them during the funding period. This includes recording the funding level on the last day of the period and observing that the projects are removed if they are removed. Overall, 12 of the 42

tracked projects, or roughly 29%, failed. Second, tracking the funding on a daily basis allows

analysis of the pattern of funding over the campaign period. We can hypothesize that the

beginning of the campaign starts with a burst of energy as it kicks off and then enters a period of

stagnation in the middle but finishes off as the panic sets in to the finish line. How are the

successful campaigns' trends different from unsuccessful campaigns, if at all?

Due to the limited time frame for data collection and the number of projects entering

Kickstarter during that period, we were limited in the number of live projects that could be

tracked. Hence, we supplement the tracked data with an additional sample of 66 closed projects.

For both the tracked and closed samples that we collected in addition to the descriptive

variables, we looked at the text of the projects to find key words associated with success or

failure and the level of funding. To do this, we captured all text in each project description and

processed these to determine word counts within each project for each word used across all

projects.

This textual analysis was done using the Python programming language.[1] The result is a

dictionary of potentially important terms that may be associated with the success and funding

level of the project.

With this, we should lastly consider: are there measurable traits of a successful campaign

that can predict the success of a new campaign? My hope is that this research can offer some

advice and strategy for achieving your own successfully funded Kickstarter campaign.

Controlling for other characteristics, the key results include that projects with higher

target funding levels are both less likely to fund and fund at a lower percentage of the target,

projects receiving more comments are more likely to fund, and projects proposed by those that

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fund other projects are more likely to fund. In addition, certain words are correlated with success or failure. However, since the method of identifying important words used data mining rather than just testing, we cannot predict that these words would increase the likelihood of success in future projects. Due to limited sample size and high correlations among the variables in specifications including both the project characteristics and words, the main results for each set of explanatory variables used separately tend to become statistically insignificant.

Another finding is that the funding pattern over time appears not to exhibit the herding behavior found in some asset pricing markets. This is an interesting finding given the highly social nature of funding via Kickstarter.

The remainder of this thesis is organized as follows: Section 2 summarizes the literature relevant to this study, Section 3 shows the empirical methods utilized in this study, Section 4 includes an explanation of the data in this research, Section 5 presents the main results, Section 6 delves into a discussion of the findings along with the conclusions, Section 7 represents the appendix, and Section 8 concludes the study with the references used in this study.

2. Literature Review

Founded in 2009, Kickstarter has recently gained traction in literature and research to uncover the science of entrepreneurship. With the explosion of the technology industry in Silicon Valley, people are seeking opportunities to bring their ideas to life and profit from them. This has spurred research in many business schools around the world to understand Kickstarter under the lens of finance, innovation, entrepreneurship, strategy, marketing, investments, crowdfunding, and venture capitalism.

2.1 Crowdfunding of Small Entrepreneurial Ventures

In this study by Larralde & Schwienbacher (2010), a general overview of the mechanics behind crowdfunding small entrepreneurial ventures is portrayed. Defining crowdfunding as "the financing of a project or a venture by a group of individuals instead of professional parties", this research does not limit itself to Kickstarter in particular but the science of crowdfunding applicable to any small business. The research extends the definition to "an open call, essentially through the internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes" and provides business models of crowdfunded ventures and crowdfunding platforms to include donations, passive investments by the crowd, and active investments by the crowd.

Focusing on giving insight into the different pain points and considerations of the crowdfunding process, the research presents a case study of a small business called "Media No Mad" which successfully completed acquiring initial funding through their crowdfunding efforts. This case study confirms several reasons how crowdfunding strategy would be useful to a small entrepreneurial ventures, which are attributed to a few key factors that make crowdfunding unique. Among these factors, the funding goal must be a reasonably low amount of capital, the

project itself must be interesting and innovative, the project must be willing to extend their skill set as an advantage to anybody and the creators must know how to handle the website.

2.2 Are the Life and Death of an Early Stage Venture Indeed in the Power of the Tongue? Lessons from Online Crowdfunding Pitches

In this more recent study, Maron & Sade (2013) placed the emphasis on the power of the online crowdfunding pitches. Using a text mining quantification method, the dataset was collected by custom software that included over 20,000 online business pitches with their crowdfunding results. In addition to these methods, a random survey was distributed to conduct a human coding technique of what the human perception of a project's success would be. There was a strong correlation found between human coding and text mining techniques. Their research broadly concluded that entrepreneurs' descriptions do have importance.

Because Kickstarter recently opened project creation to non-US residents at the time of their research, the research provided additional information than previous literature. The research was generally limited because unlike platforms such as "Prosper" and "Kiva", Kickstarter does not provide data directly to researchers. Analyzing the means of presentation included the basics of the project title, location and funding goal, video or photo, "About" section, perks, and entrepreneur's section. While the research included all categories, it was found that entrepreneurs of technology projects focus more on the business idea whereas entrepreneurs of artistic projects focus more on the entrepreneur. With this, name mentions are positively and statistically significant with the success of the art projects success. Furthermore, this finding is consistent with projects that have both the lowest and highest goal amounts, which suggests that it is not the entrepreneur's outside reputation that drives results.

2.3 An Empirical Examination of the Antecedents and Consequences of Contribution

Patterns in Crowd-Funded Markets

In this empirical study by Burtch, Ghose, & Wattal (2013), patterns in crowd-funded markets are examined by looking at a consumer's decision-making process for crowdfunding. As contributions are subject to crowding-out, the primary motivation is found to be altruism. The study found the length of the campaign indirectly impacting consumption of the output, as longer funding durations are linked to higher performance. This shows the importance of the role of marketing in the funding stage, as it is a direct determinant of success. In terms of data, web traffic statistics were obtained via a Google Analytics account and one of the authors developed a software to programmatically retrieve time-series data of Web traffic statistics for each URL on a daily basis, leveraging the Google Analytics Data Export file. In addition, another software application was developed to retrieve all available public information regarding the campaign such as the story characteristics, and amount of each contribution. Lastly, one of the authors manually retrieved time-series data on Google search trends for two to five key words relating to each pitch.

2.4 Crowdfunding Creative Ideas: The Dynamics of Project Backers in Kickstarter

This research by Bayus & Kuppuswamy (2014) examines the dynamics of project backers in Kickstarter in an empirical manner. The dataset is comprised of two years of data compiled on a daily basis on 14,704 projects beginning on January 1, 2010 to December 31, 2011. Projects started in 2009 were not included in the study since the web design went under several revisions, affecting the presentation of the campaign. Additionally, the dataset is restricted to projects with a duration of at least 21 days and includes time-varying variables that account for possible effects due to uncontrolled factors such as the following:

PostFunded: one for each day a project has already been funded and zero otherwise

ActiveProjects: number of Kickstarter projects across all categories that are accepting pledges per day

MaxCompetingBackers: maximum number of cumulative backers across all competing projects accepting pledges per day

There were separate dummy variables created for day of week and month-year to account for any other unobserved time-varying effects. This showed that projects are more likely to receive funding on weekdays compared to weekends as activity increases from Sunday to its peak on Wednesday and activity decreases thereafter to the lowest point on Saturday.

In congruence with existing research, projects are less likely to add backers from the beginning of the sample period to the end. The coefficient estimate for *KickstarterTraffic* is positive and significantly related to project support. This research also touches on the "Blockbuster Effect", where a project with large number of backers steals potential backers from other projects. The model shows backer support drops dramatically once a project surpasses its goal as shown by the negative and significant coefficient estimate for *PostFunded*. Additionally, binary variables *Day* and *LastDay* strongly affirm the U-shaped pattern of backer support across all project types in art, product design, film and video, games, music and technology. This pattern is pervasive in both successfully and unsuccessfully funded projects across all goal targets of different amounts.

2.5 Herd Behaviour and Cascading in Capital Markets: a Review and Synthesis

To examine the behavioral aspect of finance, this paper follows capital markets to explain how investors, firms and analysts behave in a herding manner. Herding is defined as a convergence in behavior and can be seen even with little knowledge and justification. Investors may also cascade and choose to ignore a source of information that could have been useful to

them in making a market decision. On the analysts' level, they could also exhibit herding behavior in the forecasts. This paper addresses why different phenomena of unexplainable sudden rushes in large groups occur.

Even with the rational human mind, the decisions we make are fragile and unpredictable. This is mainly due to the mixture of many different theories: reputational effects, informational effects, direct payoff interactions, preference effects, and imperfect rationality. Although reputational effects would not be comparable to the fragile nature of rational observational theories, it provides the explanation of dispersion and herding behaviors with the additional aspect of timing that rational observational theories would not provide.

2.6 The Reg A+ Bombshell: $50M Unaccredited Equity Crowdfunding Title IV takes Center Stage

In surprising changes, the SEC has released an update on the regulatory rules that now allows growing companies to raise up to $50 million with the support of anyone that can give an offering. This "mini-IPO style" change will allow for an alternative method of financing and expand the horizons of financing beyond venture capitalism or institutional capitalism. This is a direct parallel to how Kickstarter projects are funded: through individuals.

With the new exemption, there are key changes that will impact financing practices. First, the high maximum raise will impact how much issuers can raise. Anyone is now free to invest and investment limits will not exist. Additionally, self-certification of income or net worth of investors will eliminate additional required documentation, and you can now advertise your offering. Offering circular approval will be required in addition to audited financials. Issuers will now have opportunities to test the waters and continue ongoing disclosure requirements for Tier two. Most importantly, the new regulation preempts the state law, which will be a testing ground.

Shareholder limits will no longer apply, maximizing potential for small investments. The securities will be unrestricted and no funds will be raised through the prior ruling.

From the survey of literature out there today specifically on Kickstarter in addition to financing through crowdfunding, there are several gaps I wish to address through my research. The first recognizable consideration is that there has not been any research on a specific category of Kickstarter. Current literature includes a random survey of all-encompassing categories and does not consider one specific field. Maron & Sade includes comparative research on technology and art as two binaries, but does not provide conclusions specific to one category. With my research, I am focusing on the subcategory of classical music within the music category, furthering specificity in my results.

With the generational gap we see in classical music participants today, the Internet has been transforming classical music as an industry. My research will add to the recent additions in marketing strategy for classical music that has risen from Kickstarter in addition to addressing the use of leveraging social media through the Facebook share feature on the project page. Lastly, my research will further the text mining efforts found in Maron & Sade to uncover an extensive list of terms or phrases that could be use to future project creators. While it is important to recognize the importance of the name mention, my goal is to uncover the significance behind certain words and provide a dictionary compilation as a resource to help fund more successful projects in classical music in the future.

3. Empirical Methods

Kickstarter is a crowdfunding platform that is on a mission to "help bring creative projects to life". Project categories include the following: art, comics, crafts, dance, design, fashion, film & video, food, games, journalism, music, photography, publishing, technology, and theater. The main purpose in this thesis is to determine factors that lead to success or failure of the projects in terms of financing. Though it seems likely that there are factors common across all categories, it also seems likely that some factors are specific to certain categories as the type, technology, audience, and other attributes might vary across project categories. Hence, I chose to focus on classical music, as my expertise in this area is useful in identifying likely important success drivers.

Within classical music, I identified three types of success drivers. First, I define project type subcategories, as it seems likely that demand for the project's product might vary with these. First, I divide the product type into album, performance, and recording. In the classical music category, groups of musicians or soloists are looking to fund their first album. This includes the recording session in a professional studio, album artwork, and album distribution. Creators are also looking to have the costs of performances funded to cover their transportation, tours, and stage costs. Additionally, not all musicians are necessarily looking to produce a full album but rather focus on one piece or production, which is categorized as the "recording" category.

Second, I separated the type of musical group into three main categories, defined as the following: chamber, orchestra, and solo. Within the solo category, it is further broken down into solo stringed instruments, solo band instruments, and solo voice for vocalists. The piano has been categorized under the stringed instruments.

Third, I identified a set of variables common across all the groups defined above and

likely related to project success and funding level. The variables were all coded by hand from the

Kickstarter project description. These include the following:

Duration: number of days campaign will run
Start Date: day the campaign opens
End Date: day the campaign closes
Cancel Date: day the campaign is cancelled, if applicable
Canceled: campaigns cancelled before end of funding period
Target Amount: amount of funding goal
Pledged: amount pledged by supporters (tracked daily for tracked sample, and overall for closed sample)
Backers: number of supporters backing the project (tracked daily for tracked sample, and overall for closed sample)
Updates: number of updates by the creator
Comments: number of comments on the project's comments section
Website: external other websites on the project page
Video: video on the project page
Value: my personal evaluation of the project
FB: number of the creator's friends on Facebook
Projects Backed: number of projects supported by the creator themselves
Projects Funded: number of previously successful campaigns
Rewards: number of reward categories
Degree of Rewards: quality of the rewards
Fake Day: for variables with different lengths of projects, this variable normalizes the differences to a scale of 100 days
Pledged Ratio: current amount pledged divided by the total amount pledged (tracked daily for tracked sample, and overall for closed sample)
Pledged to Backer Ratio: current amount pledged divided by the number of backers (tracked daily for tracked sample, and overall for closed sample)

Each of the variables was selected based on the value it adds to the campaign. For the variable

Value, I personally evaluated the project based on the quality of the video on the campaign page,

creative content of the project, and the overall quality of the campaign as a whole. This is by no

means a scientific evaluation but rather a qualitative evaluation from my personal expertise in

music and experience in having seen many Kickstarter campaigns. As for the dummy variables, I

assigned numeric values as the following to quantify the descriptive data:

Performance Type: 1=Album, 2=Performance, 3=Recording
Group Type: 1=Solo, 2=Chamber, 3=Orchestra
*Vide*o: 0=No, 1=Yes
Value: 0=Not a quality project, 1=Quality project
Website: 0=No, 1=Yes
Degree of Rewards: 0=First degree interactions (such as a signature),
1=physical interaction with backer (such as a private concert or lunch with the artist)
Failed: 1=Project failed to fund

Because a creator of a campaign is able to set the total number of days that the campaign

should run, I hypothesize there will be significance in this variable for a project that has a

campaign length too short or too long. This will also be correlated with the amount of funding

goal that a project creator will set for the campaign. Kickstarter is funded on an all-or-nothing

model where if the project is not funded by the self-set expiration date of the self-set amount, all

the funds are returned to the campaign supporters and the project is marked as an unsuccessful

campaign. Some individuals will then choose to remove their campaign from the platform but

most will allow it to be left in the domain where it is only discoverable by utilizing the

platform's search bar.

On the campaign support's side, the page provides information on how many supporters,

also known as "backers", have invested in the project as well as the total amount that had been

collected for the project, known as "pledged". If the project is successfully funded, it remains

open and available to receive additional funds above the set-funding goal.

The creator of the project is able to provide updates throughout the campaign to the

Kickstarter community. People in the Kickstarter community are then able to engage by

providing comments on these updates or for the project in general. I hypothesize the higher

levels of engagement with the audience would be significant in running a successful campaign.

A Kickstarter profile of the creator is also required to create a campaign, which gives visibility to

the engagement of the individuals themselves. The profile of creators gives information on how

many other projects the creators have invested in themselves in addition to their past performance of previously successful campaigns, if any. There is also a Facebook feature that connects the creators' personal Facebook profiles to their Kickstarter profiles, which highlights the importance of social media in a campaign. I hypothesize a significance of strong community engagement between the investors and the creators for a successful campaign.

[2]
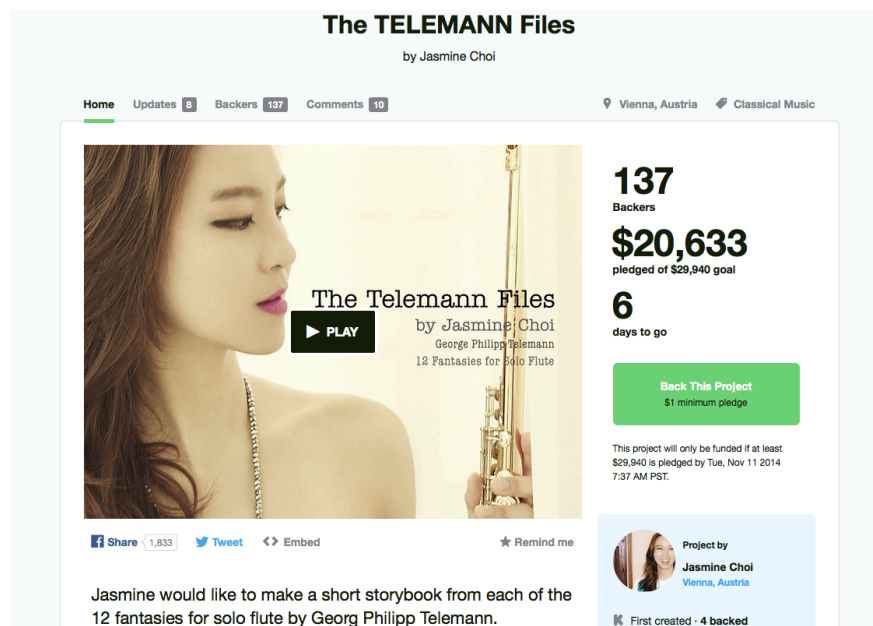
As exemplified in the project above, the project page also provides an option to add a short video that illustrates the nature of the project. This is optional, but I hypothesize captivating media engagement to be significant for a successful project, as it is the first item that appears on a campaign's page. To incentivize supporters, creators have the option of creating rewards tied to each amount that a supporter invests. As the amount of support increases, the quality of rewards increases. To measure the quality of the rewards, I created a binary measurement of what the creators offered. If the reward included a mere signature, free items, and no direct engagement

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[2] https://www.kickstarter.com/projects/2035001089/the-telemann-files

with the backer, this would qualify as a low quality reward. If the reward included a private performance at your home, a private lesson on an instrument, or a home cooked dinner celebration, this would qualify as a high quality reward.

This study will utilize a methodology of two theories. First, a logit regression will be tested to estimate the effects of the independent variables on the probability of a project being funded. This will project the importance of certain variables being crucial to the success of a campaign. Second, the Ordinary Least Squares (OLS) method will then help us understand the different levels of funding that take place. The logit regression uses a dummy variable, *Funded*, as the dependent variable. This has value of 1 for projects that successfully reach the funding threshold, and a value of 0 otherwise. The OLS regressions aim to explain the level of funding, or *Funding Ratio*, defined as the actual amount of funding received divided by the minimum target amount stated in the project in order for the project to succeed. In both types of regressions, we ran separate regressions for the main project characteristics, the important words identified through the textual analysis, and the two groups of explanatory variables together.

4. Data

There are three primary compilations of data that are initially collected. First, the projects that were observed on a daily basis from the start of the campaign were monitored to the end of the campaign. A database of 42 observations included the project's name, start date, end date, total days, target amount, cancel date (if applicable), daily amount of dollars pledged, and the number of backers supporting the project. Before starting to collect the data for the projects being monitored on a daily basis, I realized that there needed to be a supplement dataset that can track failures, which would also be useful in observing the funding pattern over a funding period for a sample of projects. Projects vanish from the Kickstarter search results page when they are unsuccessfully funded, so this dataset of tracked projects proved to be valuable in analyzing funding patterns over time.

Second, I complied a database of projects that had already closed and created a larger list of 66 observations that included the variables described in the previous section, which includes the project's name, target amount, amount funded, backers, duration, category, type of group, video, value, website, comments, updates, reward categories, degree of rewards, previously created, projects backed, and Facebook connected. Lastly, a text file was created for all projects by copying and pasting the project description on the campaign website. These text files were placed in the respective resulting folder of successful projects and unsuccessful projects. Because the projects that were already closed are all successful projects, there are only 15 projects that I was able to track to their failures with 4 projects that cancelled their campaign. This sample size is much smaller and presents an obstacle for this study, which could be further researched.

From Table 1 (below), a general overview of the range of data can be seen. On average, the projects set their target amount to be at $5,587.43 with a standard deviation of $9,336.94.

The largest funding goal is $90,000 and the smallest funding goal is $100.00. In terms of

securing the actual funding, most projects have been successful in receiving an average of

$4,819.60. With the failure to receive any funding, the minimum amount is $0.00 and the

maximum that a project has received is $30,613.00. Aside from receiving no amounts of

investment funds from having 0 backers, projects receive an average of 60 backers investing in

their projects with one single project having a maximum of 384 investors in this dataset. As the

project creators are also allowed to set the duration of their project's campaigning period, the

average number of days a campaign would run is about 41 days. The shortest project in this

sample is 7 days and the longest project in this sample is 90 days.

Table 1: Overview of Main Variables in Full Sample

Variable	N	Mean	Standard Deviation	25th Percentile	Median	75th Percentile
Target Amount	108	5,587.43	9,336.94	2,000	3,500	6,675
Funded Amount	108	4,653.68	4,819.60	1475	3,102.5	6,127.50
Backers	108	59.95	57.58	23.0	44.0	72.0
Duration (days)	108	40.67	18.00	30.0	34.5	49.0
Reward Categories	108	7.69	3.63	5.50	7.00	9.00
Previous Projects	108	0.66	1.63	0.00	0.00	0.50
Projects Backed	108	5.79	13.42	0.00	2.00	6.00
Facebook	108	149.26	473.77	0.00	0.00	59.0
Funded	108	0.87	0.34	1	1	1

To incentivize potential investors, project creators can provide different rewards for different amounts of investments. Having more levels of rewards does not necessary equate to success, as the quality of these rewards play an important role. On average, projects provide 8 different levels of rewards but ranges from as little as none to as many as 22 different levels of rewards based on the amount you invest. To account for the experience some project creators may have over others from their previously created Kickstarter projects, the sample shows most project creators do not have previous experience with a mean of less than 1 full project. Most of the project creators are running a Kickstarter campaign for the first time, and the most that a project creator has had in previous experience is 11 previous projects.

Weighing in the Kickstarter community engagement, the project creator's profile also exhibits other project creators' projects he or she may have invested in. This sample shows an average of 6 projects that the project creators have supported in the Kickstarter community and show that a project creator has invested in as many as 98 projects in the Kickstarter community. As for engagement outside of the Kickstarter community and in the larger realm of social media such as Facebook, project creators have the option of linking their Facebook accounts to their Kickstarter profiles. This allows for a larger marketing scope as updates on the project are visible to your Facebook friends, whom may not be familiar with the Kickstarter website or be aware of the project in general. Although not everyone necessarily has a Facebook account to begin with, this sample exhibits an average of 149 people that a creator would be Facebook friends with. The most a single project creator has for a Facebook audience is 3,818 people, which is clearly an outlier.

Table 2 (below) presents the same summary statistics, but is limited to the 42 projects in the tracked subsample. In this dataset, the average target amount is $8,571.31 with a median of

$5,000.00. Aside from the actual goals of the project, the actually financing amounts averaged

out to $5,219.79 with a median of $3,590.00. There is an average of 67 supporters with the

median being 46, which is larger than the sample that was not tracked and the projects lasted for

an average of 36 days, which is shorter than the sample above. As for the reward categories,

there is an average of 8 different reward options with a median of 7, which is very close to the

general sample. This subsample shows little past experience of the project creators along with

very little support of other projects in the Kickstarter community. On the other hand, there is an

average of 89 Facebook connections with a median of 23, which contains less outlier than the

general sample. Because this sample includes the projects that would cancel during the period

that they were tracked, the variable Canceled represents the average of 0.09 projects that

disappeared before completion.

Table 2: Overview of Main Variables in Tracked Subsample

Variable	N	Mean	Standard Deviation	25th Percentile	Median	75th Percentile
Target Amount	42	8571.31	14,019	3357	5000	9999
Funded Amount	42	5219.79	6218.35	787	3590	6927
Backers	42	66.64	78.12	11	46	84
Duration (days)	42	36.12	10.19	30	32	41
Reward Categories	42	8.31	4.40	5	7	10
Previous Projects	42	0.26	0.73	0	0	0
Projects Backed	42	1.64	2.62	0	1	2
Facebook	42	89.41	345.16	0	23	64
Canceled	42	0.09	0.297	0	0	0
Funded	42	0.67	0.48	0	1	1

The represented variables include measurements in days for duration and U.S. dollar amounts for all currency variables. There are apparent differences between this subsample and the closed subsample of 66 projects. For example, the *Target Amount* is statistically significantly higher in the tracked sample. As seen below, this might be due to the fact that higher target amount projects are more likely to fail, and the closed sample contains no failure. The opposite results could explain the variable of *Duration*. For this variable, it is beneficial to have more time in completing the project campaign

Since we use this subsample to show the funding pattern over the funding period, and duration ranges widely over the projects, we normalized all project durations to show the funding amounts for each "day" expressed as a percentage of the full funding period. This was accomplished by creating a *Fake Day* variable. Using the nearest day to the percentile rank when available, a percentage is created by having variables 1 through 100 while interpolating the missing values to produce the variable. Note that values in Table 2 are calculated for each variable on the last day of the funding period (or when they were terminated if this occurred before the end of the funding period), rather than showing the average across all days of the funding period.

In Table 3 (below), we summarize the values the two ratios created from the existing variables. These are the *Funding Ratio* (*Funded Amount* divided by the *Target Amount*), which is used as the dependent variable in the OLS regression in Table 6 (below), and the ratio of *Funded Amount* to *Number of Backers*, showing the average contribution for project backers for each project.

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			Standard	25th		75th
Variable	N	Mean	Deviation	Percentile	Median	Percentile
Funded Amount to Target Amount Ratio	108	1.18	1.35	1.02	1.06	1.20
Funded Amount to Backers Ratio	106	76.55	45.17	50.0	64.02	98.08

Table 3: Overview of Funding Ratios

Note: Two observations are lost in the Funded Amount to Backers Ratio due to zero denominators.

Table 4 (below) presents the correlations among the main variables. Each cell in the tables shows the pairwise correlation, p-value for the significance, and number of observations for the pair. This is useful partly to show where high correlations among the variables might cause multicollinearity problems in regression specifications, but it also provides some evidence on the drivers of funding. For example, the negative (and nearly significant at the 11% level) correlation between the funding ratio and the target amount indicate that higher target amounts make success less likely. One important aspect of raising funds is to set a goal that is practical and attainable. Hence, projects that did not follow this model and had too high of an expectation or too large of a project tended not to succeed.

Table 4: Correlation Matrices

N = 106	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Funded Amount to Target Amount Ratio	1.00											
	108											
(2) Pledged to Target Ratio	-0.06	1.00										
	0.55											
	103	106										
(3) Duration	-0.05	0.04	1.00									
	0.68	0.71										
	108	106	108									
(4) Reward Categories	0.10	0.28	-0.08	1.00								
	0.30	0.00	0.44									
	108	106	108	108								
(5) Degree of Rewards	-0.09	0.22	0.02	0.40	1.00							
	0.39	0.02	0.83	0.00								
	108	106	108	108	108							
(6) Previous Projects	-0.01	-0.08	0.14	-0.08	0.12	1.00						
	0.96	0.44	0.16	0.48	0.22							
	108	106	108	108	108	108						
(7) Projects Backed	0.05	-0.17	0.18	-0.02	0.01	0.34	1.00					
	0.65	0.07	0.06	0.87	0.99	0.00						
	108	106	108	108	108	108	108					
(8) Facebook	-0.03	-0.21	-0.01	0.06	0.07	0.09	0.19	1.00				
	0.79	0.03	0.97	0.53	0.45	0.38	0.04					
	108	106	108	108	108	108	108	108				
(9) Backers	0.02	0.03	-0.02	0.51	0.27	-0.05	-0.03	-0.10	1.00			
	0.81	0.80	0.87	0.00	0.01	0.60	0.76	0.32				
	108	106	108	108	108	108	108	108	108			
(10) Funded Amount	-0.00	0.37	0.04	0.59	0.33	-0.08	-0.11	-0.14	0.88	1.00		
	0.99	0.00	0.70	0.00	0.00	0.39	0.27	0.15	0.00			
	108	106	108	108	108	108	108	108	108	108		
(11) Target Amount	-0.16	0.43	-0.00	0.29	0.14	-0.07	-0.11	-0.09	0.28	0.37	1.00	
	0.11	0.00	1.00	0.00	0.14	0.49	0.26	0.36	0.00	0.00		
	108	106	108	108	108	108	108	108	108	108	108	
(12) Total Days	-0.20	-0.03	1.00	-0.27	-0.10	-0.15	-0.17	0.21	-0.10	-0.04	0.07	1.00
	0.21	0.87	0.00	0.09	0.54	0.34	0.27	0.17	0.51	0.80	0.68	
	42	40	42	42	42	42	42	42	42	42	42	42

NOTE: Each cell shows the pairwise correlation, p-value for significance of the correlation, and number of observations for the pairwise correlation.

5. Main Results.

Table 5 (below) presents logit regression results predicting whether the project funds or not. The dependent variable is *Funded*, which is represented by 1 if the project funds and a 0 otherwise. We provide three specifications: one based on the non-text variables, one based on the text variables, and one with the two sets of explanatory variables used in the same specification. Key results suggest that the likelihood of a project being successfully funded declines as the target funding level increases. This shows that larger projects are not as appropriate for the type of crowdfunding offered by Kickstarter, as smaller projects are more appropriate. Apparently, the larger numbers of required participants and/or higher individual contribution levels are prohibitive. Additionally, the study suggests that projects that draw more comments are more likely to succeed. This could be due to the fact that high level of engagement from the Kickstarter community creates higher levels of interest in the project as well as an indication of how others view the project. Lastly, the study shows that projects proposed by those who themselves back other projects are more likely to succeed. Increased levels of community engagement certainly seem to indicate higher levels of success. In a sense, a creator broadens his or her network and visibility as an individual by supporting others in the Kickstarter community and giving an opportunity for other creators to return the favor.

The second specification in Table 5 shows the likelihood of funding as a function of the words emerging from the textual analysis. Several words, including "united," "question," "orchestral," and "international" are statistically significantly associated with the outcome. Since we identified these words via a combination of subjective choice and data mining, we do not claim any causal relationship and caution that use of these words in future projects does not predict success as noted elsewhere. These results merely show a correlation. In addition, when

the project characteristics in the first specification and words in the second specification are combined in the third specification, many of the formerly statistically significant variables lose their significance. From the results, it seems that either set of explanatory variables works, but when they are combined it appears the multicollinearity between the two sets reduces the significance on all explanatory variables to be insignificant. It seems likely that both the small number of failures identified in the tracked sample and the small overall size of the sample contribute to this outcome.

Table 5. Logit Regression Results Explaining Funding Status Using Full Sample

Target Amount	-0.28 (-2.67)		0.21 (0.40)
Comments	0.91 (2.01)		1.16 (0.57)
Updates	0.22 (1.54)		-0.11 (-0.43)
Degree of Rewards (dummy)	1.30 (1.58)		1.40 (0.43)
Projects Backed	0.36 (2.04)		21.90 (1.35)
Facebook	0.00 (-0.84)		0.00 (-0.37)
united		-0.48 (-3.00)	-3.14 (-1.35)
question		1.65 (2.27)	2.19 (0.95)
orchestral		-1.56 (-2.27)	-26.49 (-1.20)
download		1.02 (1.78)	3.71 (1.18)
score		1.08 (1.62)	5.48 (0.71)
vip		-1.13 (-1.09)	-5.65 (-0.00)
international		-1.82 (-2.09)	0.53 (0.14)
Constant	0.70 (1.08)	1.66 (2.70)	-0.52 (-0.35)
N	108	107	107
Probability > Chi-squared	0.00	0.00	0.00

NOTES:
1. One observation was lost due to missing data in two specifications.
2. z-statistics in parentheses.

Table 6 (below) presents OLS regression results explaining the level of funding across all projects using the *Funding Ratio* (*Funded Amount* divided by the *Target Amount*) as the dependent variable. Note that in these regressions we exclude two projects with extremely high outlier funding ratios, as they dramatically alter the regression results. With this limitation, we

then run three specifications: one based on the non-text variables, one based on the text variables, and one with the two sets of explanatory variables used in the same specification. The first specification includes the project characteristics, while the second is based on the textual analysis, and the third combines the two sets of variables.

Similar to the logit results, the coefficient on *Target Amount* shows that the *Funding Ratio* declines with the *Target Amount*. To an extent, this is not surprising as the *Funding Ratio* denominator is the also the *Target Amount*. We also see that *Funding Ratio* increases with both the number of backers and the amount contributed per backer. Interestingly, the *Funding Ratio* also increases with the previous number of projects proposed by the same project proposer. This seems consistent with the idea that individuals learn through doing on Kickstarter.

Also similar to the results for the logit regression, several of the words are predictive of the *Funding Ratio*. However, all of the variables included in the first two specifications become insignificant again when the two groups of variables are combined. As previously shown, it appears likely that the sample size and multicollinearity eliminate the statistical significance of the effects found in the first two specifications.

Table 6. OLS Regression Results Explaining Funding Ratio Using Full Sample

|			
Target Amount	-2.10 (-3.12)		-2.30 -(2.87)
Backers	0.18 (2.90)		0.22 (3.20)
Funded Amount to Backers Ratio	0.18 (2.33)		0.14 (2.04)
Project Type: Album	5.01 (0.71)		4.13 (0.56)
Comments	1.33 (1.49)		0.75 (0.84)
Degree of Rewards (dummy)	11.69 (1.31)		10.42 (1.31)
Previous Projects	2.48 (1.04)		0.61 (0.30)
Projects Backed	0.34 (1.67)		0.07 (0.33)
united		-6.23 (-3.74)	-5.11 (-3.33)
question		10.34 (2.58)	7.03 (2.03)
orchestral		-14.95 (-5.92)	-8.80 (-1.00)
download		3.31 (3.24)	1.51 (1.42)
score		5.91 (2.33)	5.22 (1.85)
vip		-9.51 (-1.93)	18.75 (1.58)
international		-17.64 (-4.44)	-14.12 (-3.97)
Constant	76.60 (6.05)	99.02 (12.81)	78.06 (5.93)
N	104	105	103
R-squared	0.30	0.37	0.49

NOTES:
1. Two observations were excluded as outliers for the Funding Ratio, and in each specification 1 to 3 additional were lost due to missing data.
2. t-statistics in parentheses. Standard errors estimated using White correction.

Finally, we examine graphs of the funding patterns for the tracked sample (below). Several interesting observations can be made from the effects of the *Pledged to Target Ratio* on the *Percentage of Duration*. From the literature review, I hypothesized a herding behavior in the trend that would be seen over time. I expected a last minute pull to the finish as the deadline of the projects approaches and a lull in the beginning to the middle of the campaign. Contrary to my belief, most of the projects appear to fund in a very smooth path from the beginning to the end. This shows first, a lack of herding behavior, which might be expected in a market where funding levels are visible to all participants. If a project receives early funding, others might be expected to join the herd, yielding rapid funding. Second, the all-or-nothing funding model pushes for a crunch time at the end of the campaign, and one might expect to see a large number of projects with a significant amount of funding in the last few days as friends and family put the project over the top. However, this does not appear to be the case.

Additionally, it is rare for projects to fund at a ratio that is much greater than one, which seems curious. It suggests that the demand for the projects output is nearly always just at the level which would minimally allow the project to fund. From this, it seems that there could be many projects, which would fund at a level much lower than the ultimate demand for the project output. This result might be expected if many of the projects received a large boost at the end, but as noted above, this is not the case. Therefore, there is not an obvious explanation for the clustering of the final *Funding Ratio* just above 1. This suggests an important direction for additional research.

Graphs by Dummy=1 if failed to fund (prat100<1)
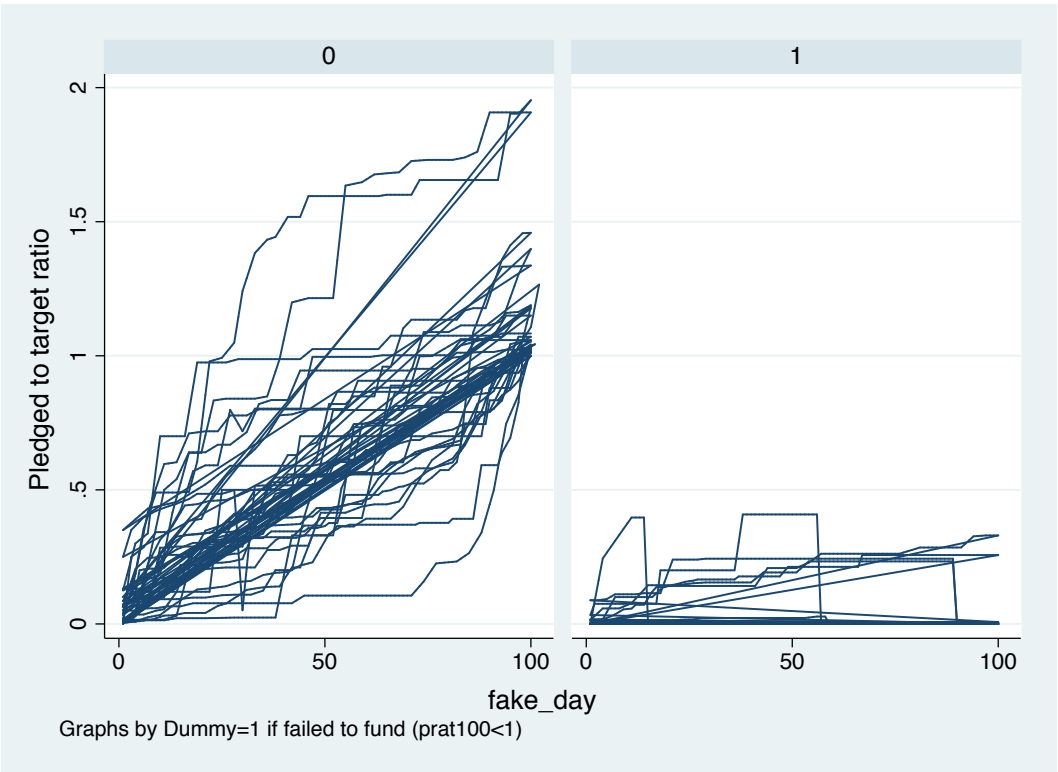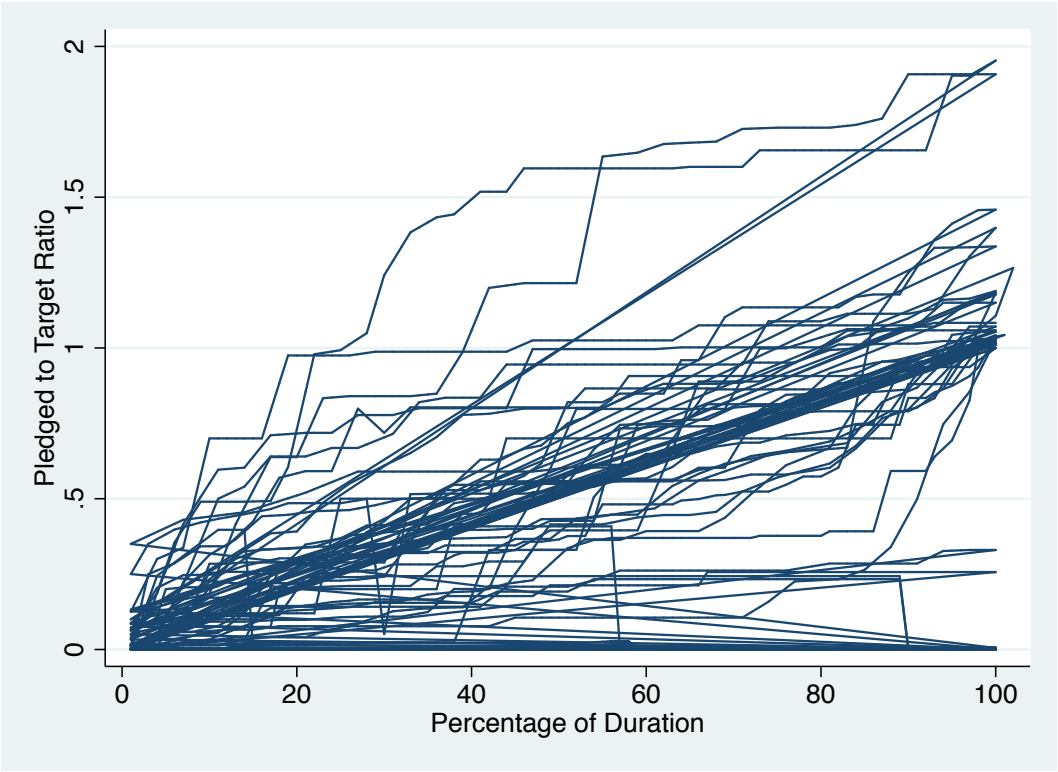
6. Discussion and Conclusions

Based on the regression results, several variables appear to drive both successful funding and funding ratios for Kickstarter projects. These include the *Target Amount*, *Comments* on the campaign, *Backers*, *Projects Backed* and *Previous Projects*, along with several words identified through the textual analysis. However, when using just the main attribute variables, some variables were relevant yet when using the words, some words were relevant. However, when the two sets of data were combined, the elements that were found to be relevant generally become insignificant which is likely due to the limited sample size and high level of correlation across the two groups of variables.

For further study, a greater scope can be covered with the limited nature of the data source by a more advanced method of data gathering. More data would provide further details that this study did not cover. Due to the high collinearity of the results, no strong significance of a variable was found, but there is room for further research with a larger dataset. Overall, markets operate differently and the herding behavior that I had hypothesized was not the case with the Kickstarter community. This can be attributed to the fact that Kickstarter "brings creative projects to life" and this study focused on the classical music subcategory, which is not focused on a product. Understanding how this model works with the nature of financing the intangible has proved to be a challenging yet interest study that my study did not necessarily answers the questions to, but rather suggested additional research that can be done.

7. Appendix

7.1 Tracked Projects

id	name	target_amount	funded_amount	backers	duration	production_type	group_type	video	value	website	comments	updates	reward_cats	rewards_degree	previous_projects	projects_backed	facebook
1	OMG, GMO! Gustav Mahler Orchestra needs you!	6000.00	32.00	1	24	orchestra academy	startup	1	0	1	1	0	7	0	0	0	0
2	January: Songs and Chamber Music by Mark Rimple	3000.00	3040.00	56	41	recording	chamber	0	1	1	0	17	4	1	0	0	64
3	Steve Schwartz Classical Steel Guitar CD	500.00	500.00	9	41	recording	guitar	1	1	1	1	9	8	1	0	0	6
4	New York Festival Orchestra Inaugural Season	8500.00	10002.00	35	28	performance	symphony	1	1	1	1	0	13	0	0	0	149
5	Rolf Tribute	10000.00	10170.00	60	57	performance	violin	1	1	1	0	0	4	1	0	0	0
6	Rodman in North Korea - The Satirical Opera	9999.00	6.00	2	44	performance	voice	1	0	0	0	2	5	0	0	0	0
7	Kaleidoscope Chamber Orchestra - Opening Season	29700.00	30613.00	384	40	performance	orchestra	1	1	1	7	6	19	1	0	3	150
8	Amy Wallace's Debut Album	8000.00	8345.00	67	60	album	voice	1	1	1	2	5	11	1	0	0	0
9	Rebirth of the Crystals: A Final Fantasy IX Oratorio	15000.00	0.00	0	29	album	voice	1	0	0	0	0	10	0	4	11	6
10	Recording the arias of Miriam Leah as heard in Central Park	600.00	839.00	33	30	album	voice	1	1	0	1	1	5	0	0	1	36
11	Messiah 2.0 - An Arrangement for Contemporary Pop Ensemble	90000.00	2478.00	11	40	album	orchestra	0	1	1	0	0	10	1	0	0	7
12	Kevin J. Cope - Debut Guitar/Composition CD	5000.00	5212.00	148	31	recording	guitar	1	1	1	1	3	11	1	0	9	102
13	Solo Violin Album - Jessica Lee, violin; Reiko Uchida, piano	5000.00	5292.00	41	30	album	violin	0	1	1	0	1	7	1	0	1	0
14	2015 Composer Recording Project	3500.00	899.00	31	60	recording	conducting	1	1	1	0	1	7	0	0	0	66
15	French Chamber Music Festival	4000.00	1.00	1	49	performance	chamber	0	1	0	0	0	1	0	0	0	2251
16	The Very Peculiar Instrumental Music of Giovanni	10000.00	11886.00	219	29	recording	chamber	1	1	1	2	1	10	1	0	1	195
17	Piece by Piece	3500.00	3580.00	50	33	recording	chamber	1	1	1	2	9	7	0	0	1	24
18	The Little Sweep	400.00	460.00	20	32	performance	voice	0	0	0	0	0	4	0	0	0	4
19	Young People's Concert with the DSSO	3500.00	3600.00	55	34	performance	orchestra	1	1	0	3	1	7	1	0	1	0
20	The Incidental Purge -- Music for Screen and Stage	13000.00	13219.00	224	32	recording	chamber	1	1	1	11	6	10	0	0	5	0
21	Maryland Wind Festival Funding Campaign	3500.00	5105.00	71	44	performance	chamber	0	1	1	0	2	10	1	0	6	0
22	Encounters: Music Inspired by Our National Parks	6000.00	6252.00	107	29	album	chamber	1	1	1	8	12	9	1	0	3	100
23	Guitar Nouveau: Explorations on Two Electric Guitars	4000.00	4284.00	74	37	album	guitar	1	1	1	1	4	7	1	2	7	54
24	Bringing the Choral Masterpiece Carmina Burana to China	6500.00	0.00	0	32	performance	voice	0	0	1	0	0	3	1	0	0	13
25	Saint-Exupery / album & concert	20000.00	20007.00	172	37	performance	orchestra	1	1	1	12	7	16	1	0	2	44
26	Alissa Roca and Jason Mulligan record their debut album	3000.00	990.00	16	32	album	voice	1	1	1	1	0	13	1	0	1	25
27	The Australian Studio Orchestra, Opera Project	10000.00	69.00	3	47	recording	voice	1	0	1	0	0	3	0	0	0	24
29	The Great Lakes Wind Symphony	12000.00	12440.00	177	32	performance	orchestra	1	0	1	0	11	6	1	0	1	25
30	Larchmere String Quartet Debut Album: Music by Stephan Krehl	2000.00	3906.00	61	37	album	quartet	1	1	1	0	3	13	1	0	1	25
32	Reno Video Game Symphony's First Album	2382.00	4544.00	71	32	album	orchestra	0	1	1	8	6	7	1	0	1	0
33	Cantus and The Four Loves	12000.00	15185.00	143	23	performance	voice	1	1	1	4	4	22	1	1	2	0
34	Melody and Company Chamber Series	7500.00	7900.00	90	40	performance	chamber	1	1	1	0	9	7	1	1	2	0
35	The road to Italy!	4300.00	1046.00	10	45	performance	voice	1	1	1	0	0	5	1	0	0	40
36	Music for Saxophone and Bass Trombone CD Recording Project	3000.00	3000.00	50	30	recording	chamber	1	1	1	1	2	7	1	0	5	42
37	Brian Zator-Marimba Solo and Chamber Albums	4500.00	6015.00	84	30	recording	marimba	1	1	1	1	5	15	1	0	4	86
38	Music Written for Every Day	5000.00	25.00	1	27	performance	composition	0	0	1	0	8	4	0	0	0	0
39	Joanie at the International Competition Clermont Ferrand	2000.00	2025.00	22	15	performance	voice	1	1	0	0	4	6	1	0	0	0
40	Madera Wind Quintet: Five Piece Combo Recording Project	6860.00	6927.00	118	31	recording	chamber	1	1	1	0	3	6	1	1	2	0
41	Launch a New Orchestra	3375.00	787.00	17	27	performance	orchestra	0	0	1	0	1	12	1	1	0	129
42	The Creation String Quartet- Live in Concert! April 29 2015	600.00	245.00	4	57	performance	chamber	1	1	1	0	2	3	0	0	0	22
43	Portrait of Youth: Michele Anderson's solo piano album	7279.00	2889.00	19	30	album	piano	1	1	1	2	7	8	1	0	0	66
44	Classics on Hudson	5000.00	5416.00	42	30	performance	chamber	1	1	1	1	0	7	1	0	0	0

Time Series

7.2 Already Successfully Funded Projects

id	name	target_amount	funded_amount	backers	duration	production_type	group_type	video	value	website	comments	updates	reward_cats	rewards_degree	previous_projects	projects_backed	facebook
1001	The Bach/Gould Project	10000.00	13087.00	150	60	Album	string quartet	1	1	1	2	2	7	1	0	0	0
1002	Las Rubias del Norte need help to complete their third album.	2000.00	2285.00	44	25	Album	voice	0	0	0	0	2	4	0	0	1	0
1003	J.S Bach - Six Suites for Cello Solo, a complete recording by Ovidiu M	7840.00	8337.00	85	89	Album	solo cello	1	1	1	13	10	11	1	0	3	0
1004	Gordon Withers - Pre-Order The New Solo Cello Album	2500.00	2847.00	82	29	Album	solo cello	1	1	1	2	6	8	1	2	34	0
1005	Performance of Lawrence Axelrod's "Songs of Yes" in Chicago by new	2100.00	2000.00	14	51	Album	composition	0	0	1	0	3	4	0	0	2	0
1006	Casualites: Unwoman solo album	2500.00	2825.00	40	77	Album	chamber	0	0	1	1	3	6	1	11	60	835
1007	Be a part of the new Vetran record!	1000.00	1505.00	25	39	Album	guitar	1	1	0	4	2	8	1	0	0	551
1008	Kayle Clements Project	5567.00	5863.00	72	40	Album	piano	1	1	1	10	14	7	1	0	3	470
1009	Tenor, Bryce Westervelt's debut CD: Franz Schubert's Die Schone Mu	6500.00	7500.00	151	71	Album	voice	1	1	1	8	43	9	1	1	4	25
1010	Bach 'Cello Suites for Archguitar, solo recording	2500.00	3340.00	54	63	recording	guitar	1	1	1	6	10	8	1	0	7	0
1011	Burning Bayreuth: Reclaiming the Concert Hall from a Century of Stifli	3500.00	3885.00	41	52	performance	boivr	1	0	0	0	9	12	0	0	25	0
1012	Mata Atlântica (Atlantic Forest) Piano Suite	3000.00	4545.00	50	89	recording	composition	1	1	1	12	12	8	1	0	6	0
1013	Jump Start an Opera Singer's Career: BASOTI in San Francisco	1100.00	1252.00	23	89	performance	voice	1	0	0	2	8	8	1	0	0	0
1014	"Blue" Gene Tyranny Records New Piano Works	2500.00	2500.00	24	39	recording	piano	1	1	0	0	2	9	0	0	10	0
1015	Sean Hickey - Clarinet Concerto Recording Project	2000.00	2055.00	24	69	recording	clarinet	0	0	1	4	0	3	0	0	7	0
1016	PALISADES VIRTUOSI - New American Masters, Volume 4	6850.00	7106.00	72	89	album	chamber	1	1	1	0	17	8	1	1	10	753
1017	Bluest Butter Larvae (for String Quartet)	6000.00	6125.00	61	45	performance	chamber	1	1	1	4	18	11	1	0	2	0
1018	HARAMBE! Kierstin Gray's Studio Album Project	7500.00	7845.00	76	62	Album	voice	1	1	1	2	20	10	1	0	12	0
1019	2nd Annual Pride Concert: Music by Gay and Lesbian Composers	600.00	700.00	9	47	performance	chamber	0	1	1	1	0	3	1	1	7	400
1020	Plainspeak - A Large Scale Classical/Folk Record by Aaron Roche and	3000.00	3115.00	22	30	Album	chamber	1	1	0	0	0	4	0	0	2	0
1021	Melody's Chopin CD	3500.00	3731.00	62	40	Album	piano	1	1	1	0	4	7	1	1	2	0
1022	Award winning high school orchestra to perform at Carnegie Hall!!	100.00	1436.00	29	30	performance	orchestra	1	1	0	0	0	10	0	0	0	0
1023	Rebecca and Sequina on an Operatic Journey	5000.00	5771.00	68	46	performance	voice	1	1	1	5	8	11	1	0	2	0
1024	the Boston Composers' Coalition: Concert Season No. 1	1500.00	1595.00	23	31	performance	composition	1	1	1	2	1	8	1	0	1	0
1025	Bringing Pierrot into the 21st Century	3800.00	3800.00	45	21	performance	chamber	1	0	1	0	2	9	1	0	0	0
1026	Retrofit Scores	500.00	675.00	39	14	performance	media	1	0	1	1	0	0	0	0	21	0
1027	A Christmas Album from Her Majesty's Orchestra	1500.00	2275.00	53	7	Album	orchestra	1	1	1	4	2	7	1	0	1	251
1028	YOU Release Kat Parsons' Album!	15000.00	17727.00	181	45	Album	guitar	1	1	1	9	24	9	1	0	71	0
1029	Steven Jamail's Solo Concert Debut!	4000.00	4035.00	18	20	performance	composition	1	1	1	0	2	5	0	0	4	0
1030	Record and Release Nick's First CD: String Quartet No. 1	2300.00	2350.00	35	60	recording	composition	1	0	1	1	3	8	1	1	13	0
1031	The CHORDIALS are recording their 5th CD!	1500.00	1640.00	15	30	Album	voice	0	0	0	1	0	6	1	0	0	0
1032	Claudio Monteverdi's Vespers of 1610	2500.00	3350.00	43	55	performance	voice	1	1	1	0	7	5	1	7	6	204
1033	Pre-Order Wes Swing's "Through a Fogged Glass"	8000.00	8045.00	150	27	Album	chamber	1	0	1	4	2	5	1	3	1	0
1034	Classical: ESS Orchestra - Beethoven's 9th, New Years Eve	1000.00	1445.00	19	15	performance	orchestra	1	0	1	0	3	8	1	4	0	0
1035	Cucumbers and Gin: Inside a Studio Recording	750.00	1150.00	34	31	recording	violin	1	1	1	6	11	7	1	2	98	832
1036	The Israeli Chamber Project's Debut CD!	7500.00	8240.00	64	34	Album	chamber	1	1	1	2	5	6	1	0	0	0
1037	Be a Bridge to Barber recording!	6463.00	6498.00	130	30	recording	voice	1	1	1	3	8	9	1	0	0	1080
1038	"The Sea In My Dreams" - Music for String Quartet	2500.00	2580.00	43	35	recording	chamber	1	1	1	4	16	6	1	0	5	0
1039	Aqua Madora: A Limited Edition CD by Randy Gibson	1000.00	1100.00	22	36	Album	piano	1	0	1	0	6	6	0	3	9	0
1040	The Hildegunn Gjedrem Group Sophomore Album!	8000.00	8300.00	63	27	Album	voice	1	0	0	9	6	9	1	1	6	0
1041	Rhymes With Opera: Criminal Intent	2000.00	2016.00	44	30	performance	voice	1	1	1	0	6	6	1	0	28	0
1042	The Deviant Septet Inaugural Concert Project	3500.00	3580.00	34	56	performance	chamber	1	1	1	1	5	7	1	0	1	0
1043	Meerenai is commissioning a flute composition from Daniel Felsenfeld	5000.00	5290.00	130	43	performance	flute	1	1	1	4	11	14	1	2	22	185
1044	Hailey's (R)Evolutionary Cello Album	2000.00	2165.00	42	55	Album	cello	1	1	0	7	7	3	0	0	0	0
1045	13 WAYS OF LOOKING AT THE GOLDBERG: Bach Reimagined	5000.00	5100.00	54	30	Album	piano	1	1	1	0	16	8	1	0	2	0
1046	The Sequel to Wrong, Wrong, Wrong! -- a commssion project	500.00	585.00	11	45	performance	piano	1	1	1	3	2	9	1	0	4	1385
1047	The Short Liszt	6000.00	6634.00	36	45	performance	piano	1	1	1	9	3	9	1	0	0	0
1048	An Epic Acoustic Metal Record	2500.00	3090.00	88	30	Album	chamber	1	1	1	6	4	6	0	0	0	0
1049	Yellow Humphrey Makes an Album!	2400.00	2495.00	47	60	Album	chamber	1	0	1	0	0	4	0	0	2	0
1050	Magic Hypercube Music at betterArt!	185.00	196.00	9	90	performance	composition	0	0	1	0	2	1	0	2	6	0
1051	commission a new composition for solo saxophone	500.00	1151.00	37	90	performance	composition	0	0	1	1	2	6	0	0	66	512
1052	Perfect Harmony: Summit Chorale with the Westfield Symphony	5000.00	6130.00	55	45	performance	orchestra	1	1	1	0	3	7	1	0	1	0
1053	Send PULSE Percussion to Merkin Concert Hall!!	1500.00	1828.00	35	30	performance	chamber	0	0	0	0	4	8	1	2	1	0
1054	Piano Suite EP - Recording and Concert	1000.00	2165.00	47	30	recording	piano	0	0	1	0	5	7	1	2	4	647
1055	Kooman & Dimond - "Out of our Heads"	8000.00	13180.00	117	30	Album	voice	1	1	1	11	2	16	1	0	6	0
1056	Doug Lamey's Upcoming Album	5000.00	5418.00	92	40	Album	violin	1	1	1	5	6	8	1	0	3	0
1057	The Giving Tree Band 2011 Tour	10000.00	14122.00	129	60	performance	chamber	1	1	1	13	7	13	1	0	0	0
1058	Classical Revolution Midwest Mini-tour!	500.00	580.00	19	18	performance	chamber	1	0	1	0	2	14	1	0	8	3818
1059	L'Amore della Musica Quintet's Concert Series for Seniors	5000.00	5551.00	66	30	performance	chamber	1	1	1	1	4	6	1	1	1	0
1060	theRoadKill Orchestra's 2nd Album (second attempt)	1500.00	1941.00	43	30	recording	orchestra	1	1	1	0	3	4	1	4	0	194
1061	A recording of my Irish-fiddle inspired string quartet	150.00	156.00	4	9	performance	chamber	1	0	0	0	2	4	0	0	0	19
1062	Percussion Recital - Commissioning New Works	1000.00	2030.00	30	28	recording	solo percussion	1	1	1	1	8	6	1	0	10	0
1063	TENET Five Senses CD	5000.00	5735.00	55	60	Album	voice	1	1	1	0	5	8	1	7	6	204
1064	Commission John Leszczynski for soprano sax and piano!	800.00	1620.00	26	41	performance	composition	0	0	1	0	1	5	0	2	2	0
1065	Composer Writing Piece for Vienna Festival	1250.00	1689.00	27	21	performance	piano	1	0	1	1	6	3	0	0	7	0
1066	Handel-Halvorsen Passacaglia: A Music Video	13192.00	14439.00	111	25	recording	chamber	1	1	1	0	9	11	1	2	1	0

7.3 Textual Analysis

phrase	all_n	totwords_all	rank_all	successful_n	totwords_su	rank_su	successful	twords_u	rank_un	rankdif_su_un
program	135	85925	0.001571	121	76978	0.0015719	14	8946	0.001565	0.6932416
tickets	76	85925	0.000885	68	76978	0.0008834	8	8946	0.000894	1.088512
performance	133	85925	0.001548	119	76978	0.0015459	14	8946	0.001565	1.904892
website	104	85925	0.00121	93	76978	0.0012081	11	8946	0.00123	2.146245
musical	63	85925	0.000733	56	76978	0.0007275	7	8946	0.000783	5.499204
edition	53	85925	0.000617	48	76978	0.0006236	5	8946	0.000559	6.464578
chamber	81	85925	0.000943	72	76978	0.0009353	9	8946	0.001006	7.070403
original	57	85925	0.000663	52	76978	0.0006755	5	8946	0.000559	11.66086
season	67	85925	0.00078	61	76978	0.0007924	6	8946	0.000671	12.17434
name	135	85925	0.001571	122	76978	0.0015849	13	8946	0.001453	13.1705
home	65	85925	0.000757	57	76978	0.0007405	8	8946	0.000894	15.37831
invitation	45	85925	0.000524	39	76978	0.0005066	6	8946	0.000671	16.40525
video	167	85925	0.001944	151	76978	0.0019616	16	8946	0.001789	17.30905
years	63	85925	0.000733	58	76978	0.0007535	5	8946	0.000559	19.4553
perform	52	85925	0.000605	45	76978	0.0005846	7	8946	0.000783	19.789
international	23	85925	0.000268	19	76978	0.0002468	4	8946	0.000447	20.03034
thank	174	85925	0.002025	154	76978	0.0020006	20	8946	0.002236	23.50644
love	48	85925	0.000559	41	76978	0.0005326	7	8946	0.000783	24.98529
travel	28	85925	0.000326	23	76978	0.0002988	5	8946	0.000559	26.01224
ensemble	59	85925	0.000687	55	76978	0.0007145	4	8946	0.000447	26.73626
dinner	27	85925	0.000314	22	76978	0.0002858	5	8946	0.000559	27.31131
works	128	85925	0.00149	117	76978	0.0015199	11	8946	0.00123	29.0315
hall	61	85925	0.00071	57	76978	0.0007405	4	8946	0.000447	29.33441
personalized	25	85925	0.000291	20	76978	0.0002598	5	8946	0.000559	29.90945
pieces	62	85925	0.000722	58	76978	0.0007535	4	8946	0.000447	30.63348
premiere	72	85925	0.000838	62	76978	0.0008054	10	8946	0.001118	31.23931
song	73	85925	0.00085	68	76978	0.0008834	5	8946	0.000559	32.44603
cover	54	85925	0.000629	51	76978	0.0006625	3	8946	0.000335	32.71815
quartet	55	85925	0.00064	52	76978	0.0006755	3	8946	0.000335	34.01723
release	105	85925	0.001222	97	76978	0.0012601	8	8946	0.000894	36.58459
vip	10	85925	0.000116	6	76978	0.0000779	4	8946	0.000447	36.91829
audio	27	85925	0.000314	21	76978	0.0002728	6	8946	0.000671	39.78856
solo	89	85925	0.001036	83	76978	0.0010782	6	8946	0.000671	40.75393
studio	80	85925	0.000931	75	76978	0.0009743	5	8946	0.000559	41.53953
private	72	85925	0.000838	61	76978	0.0007924	11	8946	0.00123	43.71656
percussion	53	85925	0.000617	51	76978	0.0006625	2	8946	0.000224	43.89633
recordings	43	85925	0.0005	35	76978	0.0004547	8	8946	0.000894	43.95791
vocal	23	85925	0.000268	17	76978	0.0002208	6	8946	0.000671	44.98485
songs	55	85925	0.00064	53	76978	0.0006885	2	8946	0.000224	46.49448
thanking	7	85925	8.15E-05	2	76978	0.000026	5	8946	0.000559	53.29276
concerts	64	85925	0.000745	53	76978	0.0006885	11	8946	0.00123	54.10914
patrons	6	85925	6.98E-05	1	76978	0.000013	5	8946	0.000559	54.59183
poster	130	85925	0.001513	112	76978	0.001455	18	8946	0.002012	55.71112
please	73	85925	0.00085	70	76978	0.0009094	3	8946	0.000335	57.40053
festival	54	85925	0.000629	53	76978	0.0006885	1	8946	0.000112	57.67266
directly	65	85925	0.000757	63	76978	0.0008184	2	8946	0.000224	59.4852
friends	58	85925	0.000675	57	76978	0.0007405	1	8946	0.000112	62.86895
record	88	85925	0.001024	84	76978	0.0010912	4	8946	0.000447	64.40937
exclusive	36	85925	0.000419	27	76978	0.0003507	9	8946	0.001006	65.52866
shout	15	85925	0.000175	8	76978	0.0001039	7	8946	0.000783	67.85468
paintings	8	85925	9.31E-05	1	76978	0.000013	7	8946	0.000783	76.94819
postcard	36	85925	0.000419	26	76978	0.0003378	10	8946	0.001118	78.00593
sticker	26	85925	0.000303	17	76978	0.0002208	9	8946	0.001006	78.51939
production	64	85925	0.000745	51	76978	0.0006625	13	8946	0.001453	79.06365
painting	14	85925	0.000163	6	76978	0.0000779	8	8946	0.000894	81.631
professional	42	85925	0.000489	31	76978	0.0004027	11	8946	0.00123	82.68873
copy	211	85925	0.002456	196	76978	0.0025462	15	8946	0.001677	86.9455
send	64	85925	0.000745	50	76978	0.0006495	14	8946	0.001565	91.5409
score	91	85925	0.001059	74	76978	0.0009613	17	8946	0.0019	93.8977

phrase	all_n	totwords_all	rank_all	successful_n	totwords_su	rank_su	successful_un	twords_u	rank_un	rankdif_su_un
composer	81	85925	0.000943	65	76978	0.0008444	16	8946	0.001789	94.41117
first	148	85925	0.001722	125	76978	0.0016238	23	8946	0.002571	94.71409
copies	61	85925	0.00071	47	76978	0.0006106	14	8946	0.001565	95.43811
special	79	85925	0.000919	63	76978	0.0008184	16	8946	0.001789	97.00932
recording	271	85925	0.003154	235	76978	0.0030528	36	8946	0.004024	97.13245
sketches	11	85925	0.000128	2	76978	0.000026	9	8946	0.001006	98.00547
photo	36	85925	0.000419	24	76978	0.0003118	12	8946	0.001341	102.9604
anywhere	151	85925	0.001757	127	76978	0.0016498	24	8946	0.002683	103.2941
album	262	85925	0.003049	226	76978	0.0029359	36	8946	0.004024	108.8241
opera	78	85925	0.000908	61	76978	0.0007924	17	8946	0.0019	110.7856
debut	27	85925	0.000314	15	76978	0.0001949	12	8946	0.001341	114.6521
free	91	85925	0.001059	72	76978	0.0009353	19	8946	0.002124	118.8522
composers	91	85925	0.001059	72	76978	0.0009353	19	8946	0.002124	118.8522
framed	31	85925	0.000361	18	76978	0.0002338	13	8946	0.001453	121.933
mail	27	85925	0.000314	14	76978	0.0001819	13	8946	0.001453	127.1293
physical	80	85925	0.000931	61	76978	0.0007924	19	8946	0.002124	133.142
mention	47	85925	0.000547	31	76978	0.0004027	16	8946	0.001789	138.5796
signed	239	85925	0.002782	203	76978	0.0026371	36	8946	0.004024	138.7028
band	46	85925	0.000535	30	76978	0.0003897	16	8946	0.001789	139.8787
sneak	17	85925	0.000198	4	76978	0.000052	13	8946	0.001453	140.1201
download	161	85925	0.001874	156	76978	0.0020266	5	8946	0.000559	146.7644
world	203	85925	0.002363	170	76978	0.0022084	33	8946	0.003689	148.0376
piece	172	85925	0.002002	166	76978	0.0021565	6	8946	0.000671	148.5769
preview	16	85925	0.000186	2	76978	0.000026	14	8946	0.001565	153.8964
limited	203	85925	0.002363	169	76978	0.0021954	34	8946	0.003801	160.5149
choir	21	85925	0.000244	5	76978	0.000065	16	8946	0.001789	172.3555
orchestral	23	85925	0.000268	6	76978	0.0000779	17	8946	0.0019	182.2346
symphony	63	85925	0.000733	41	76978	0.0005326	22	8946	0.002459	192.658
choral	24	85925	0.000279	5	76978	0.000065	19	8946	0.002124	205.89
dvd	78	85925	0.000908	53	76978	0.0006885	25	8946	0.002795	210.6037
orchestra	110	85925	0.00128	78	76978	0.0010133	32	8946	0.003577	256.3741
concert	397	85925	0.00462	333	76978	0.0043259	64	8946	0.007154	282.8124
digital	195	85925	0.002269	152	76978	0.0019746	43	8946	0.004807	283.2027
art	85	85925	0.000989	52	76978	0.0006755	33	8946	0.003689	301.3282
states	91	85925	0.001059	56	76978	0.0007275	35	8946	0.003912	318.4883
cd	449	85925	0.005226	428	76978	0.00556	21	8946	0.002347	321.2612
musicians	120	85925	0.001397	81	76978	0.0010522	39	8946	0.00436	330.7242
united	95	85925	0.001106	58	76978	0.0007535	37	8946	0.004136	338.2465
ships	227	85925	0.002642	167	76978	0.0021695	60	8946	0.006707	453.7458
pledged	65	85925	0.000757	65	76978	0.0008444				
consortium	21	85925	0.000244	21	76978	0.0002728				
creator	57	85925	0.000663	57	76978	0.0007405				
downloads	22	85925	0.000256	22	76978	0.0002858				
carnegie	33	85925	0.000384	33	76978	0.0004287				
cello	42	85925	0.000489	42	76978	0.0005456				
soloist	16	85925	0.000186	16	76978	0.0002079				
deductible	21	85925	0.000244	21	76978	0.0002728				
autographed	51	85925	0.000594	51	76978	0.0006625				
donations	25	85925	0.000291	25	76978	0.0003248				
sponsor	18	85925	0.00021	18	76978	0.0002338				
piano	109	85925	0.001269	109	76978	0.001416				
question	111	85925	0.001292	111	76978	0.001442				
commissioning	18	85925	0.00021	18	76978	0.0002338				
variations	21	85925	0.000244	21	76978	0.0002728				
violin	25	85925	0.000291	25	76978	0.0003248				
shirt	64	85925	0.000745	64	76978	0.0008314				
student	23	85925	0.000268	23	76978	0.0002988				

With support from Aviv Caspi (CMC '16), we counted the number of times each word appearing in any project was used across all projects, the successfully funded project, and the unsuccessful projects. We then chose a list of words for further analysis based on subjective judgment and by maximizing the relative frequency of appearance between the successful and

unsuccessful categories. In the tables above, the far right column represents the absolute value of this difference times 10,000 (for each of browsing). Hence those with higher values are most likely to be correlated success as measured by the Funded variable in the main data set. Words at the bottom of the list represent cases where the word did not appear in the unsuccessful projects. We then used a series of stepwise regressions to identify words with the greatest explanatory power.

We note that this procedure implies that the chosen words represent data mining rather than testing any hypothesis, so that we cannot infer that use of these words would lead to successful future projects.

8. References*

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