

Are the Life and Death of an Early Stage Venture Indeed in the Power of the Tongue¹? Lessons from Online Crowdfunding Pitches

Dan Marom² & Orly Sade³

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Comments are welcome

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¹ "Life and death are in the power of the tongue", The Bible, Proverbs 18:21.

² Department of Finance, Jerusalem School of Business, the Hebrew University of Jerusalem, dan.marom@mail.huji.ac.il.

³ Department of Finance, Jerusalem School of Business, the Hebrew University of Jerusalem, orlysade@mscc.huji.ac.il.

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ABSTRACT

Securing seed funding is one of the biggest challenges for any entrepreneur. While presenting an initiative to potential investors, the entrepreneur can choose the extent to which she presents herself, versus presenting the project idea. This research investigates not only this decision, but also the effect of this decision on the success of the fundraising in a leading crowdfunding financing platform (Kickstarter). In our empirical analysis, we use a text mining quantification method validated by experiments and robustness tests. This methodology was implemented on a dataset that was collected by custom software, and which includes more than 20,000 online business pitches and their crowdfunding results. Our findings indicate clearly that in Kickstarter fundraising, entrepreneurs' descriptions do matter - projects which substantially highlighted their entrepreneurs enjoyed higher rates of success, controlling for other relevant variables.

1 Introduction

"I invest in people, not ideas".

- Legendary VC investor Arthur Rock

Are investors being influenced in their investment decisions by the entrepreneurs' description? Should entrepreneurs focus their business pitches on themselves or on their projects?

There is an ongoing discussion amongst early stage venture capital investors about whether the focus in evaluating a new investment should be on the horse (the venture) or on the jockey (the entrepreneur). Arthur Rock, VC investor, argues that he focuses on people, claiming a great management team will find a good opportunity, even if they have to make a huge leap from the market they currently occupy. Jeff Busgang, an author and general partner in Flybridge Capital, wrote that "Whether you like the idea or not is irrelevant, if you don't believe the team has the wherewithal to execute it successfully." Focusing on the entrepreneur is not the only strategy that is being used and advocated in the VC industry. Other investors, such as Don Valentine, stated that in Sequoia they were looking for large growing markets first, and for the team later.

When pitching the initiative to investors, there are various methods the entrepreneur can call upon in order to convince the investor to fund the project. Most notably, the entrepreneur may decide to place the emphasis of the pitch on the business idea. Alternatively, the entrepreneur may center the presentation on his personage, calling upon his name, resume, or past accomplishments. Based upon the limited time span ("elevator's pitch") it is a clear tradeoff – if the entrepreneurs decide to highlight the team, it will leave them less time to speak about the project.

This paper empirically investigates the relative importance of the entrepreneurs' description in the early investment pitches of more than 20,000 fundraising efforts, conducted by various entrepreneurs through a leading crowdfunding platform.

Crowdfunding is a fundraising effort from an undefined large number of individuals; each invests a relatively small amount, through the internet and social networks. According to Massolution, a research firm specializing in crowdsourcing, Crowdfunding

platforms raised \$2.7 billion, and successfully funded more than one million campaigns in 2012 alone.

Our research focuses on Kickstarter.com, a leading crowdfunding platform. We used custom software to collect the investigated data. Our database consists of 4,304 ongoing projects, 16,641 successful projects, 4,128 failed projects, 22,274 entrepreneurs, 1,108,233 investors, and investments that sum up to more than 120 million dollars. The period investigated in this project is from the inception of Kickstarter, in April 2009, up until March 2012.

Researching the fundraising process through the crowdfunding platform, Kickstarter offers us a number of advantages: (1) we have the full pitch that was presented to the investors, which non-crowdfunding entrepreneurs usually keep classified; (2) we can focus on early stage finance, usually the least exposed stage to outsiders; (3) it enables us to have a very clear definition of success – the entrepreneur sets a goal and must reach it, otherwise the entrepreneur gets zero funding; (4) we have a substantial amount of ventures in a relatively short period of time.

In order to quantify the focus on the entrepreneur in the pitch we use a text mining technique that enables us to quantify large amounts of business pitches. Specifically, we count any mention of the entrepreneur's name. We examine this on three levels: first, a mention of the entrepreneur's name in the project; second, a mention of the entrepreneur's name in the first verse (the first 100 words); third, a mention of the entrepreneur's name in the "About" section (a section which essentially serves as the business plan presented to the micro-investors). The number of times the entrepreneur's name is mentioned is measured absolutely and relatively to the number of words in the section. The mean number of mentions in the entire "About" section is 0.714, the mean number of mentions in the first 100 words of the "About" section is 0.28, and the mean number of mentions in the project title is 0.174. There is a positive and significant correlation among all these measures.

We use the text mining technique measures we created in order to answer several questions about the entrepreneurs' strategy and about the campaign's success. Do entrepreneurs in different industries present themselves differently in the pitch? Do serial entrepreneurs present themselves more in the venture pitch, especially if they

have had previous success? Is the likelihood of financing success greater when more information is given about the human capital? Does the success of a financing campaign depend on the type of project? On the amount of money sought? On the entrepreneur's previous success? Obviously, in equilibrium, one would expect to find that entrepreneurs understand the factors that are important to investors, and adapt the pitch accordingly.

This word counting technique allows us to analyze a very big dataset of thousands of entrepreneurial pitches. Nonetheless, three major arguments may be voiced against our self-mentions counting mechanism: (1) The entrepreneur may highlight herself by using words like "I", "We", first or last names only, or any form that is not identical to the entry given as the entrepreneur's name on the site –we identified only the exact matches; (2) The entrepreneur could potentially highlight herself during the business pitch, but use her name only a few times. For example, writing a few paragraphs about one's self while only mentioning one's name once; (3) Self-mentioning does not necessarily mean that the project's idea is not thoroughly described as well; (4) Self-mentioning could possibly be affected by an external reputation, and fundraising success could also be affected by the same entrepreneurial reputation. This argument can be influence in two opposite directions – a very famous entrepreneur (for example a well-known artist) can mention her name several times in order to leverage the external reputation, but on the other hand there is no need to elaborate about a well-known figure, which may cause a very low amount of self-mentions by famous entrepreneur.

We employed several robustness tests, validating our mechanism against these possible biases. First, we employed a human rating method on a sub sample. The human rating method we use is similar to the method first introduced by Ravina (2008) and later used by Duarte et al. (2011). Our raters were asked to evaluate business pitches and to numerically evaluate the presentation of the entrepreneur and the business idea in the pitch. Our human coding results are positively correlated with our text mining technique. In order to cope with a potential bias from successful entrepreneurs we examine the bottom goals decile (the lowest 10% of our sample in terms of goals), a sub-sample that surely eliminates the well-known entrepreneurs – our conclusions remain the same. For additional robustness test, on a subsample of our

sample, we also examined social networks aspects of 500 entrepreneurs to cope with the concern that mentions are related to external reputation. We did not find a significant correlation between twitter followers or facebook friends of the entrepreneur to the one's self-mentions.

One may argue that most of the projects that we investigate in this paper are relatively small ventures, and with relatively negligible amounts of investments in each project, hence, the investors' decisions may be totally emotional. In order to overcome this potential criticism we repeat our results using only relatively large projects (top 10% of our sample in terms of goals set), we document that our results hold. Other robustness tests include examining investors with prior acquaintance of the entrepreneur and serial investors. Both of these tests support our findings.

We divided the projects to three categories, based upon Kickstarter's initial classification; "Artistic", "Technology" related and "Games". We find that in our sample, the mean number of times that the entrepreneur's name is mentioned at the "about" section in the Artistic category is 0.728, and is significantly higher than the Technological category, (averaging 0.506), suggesting the entrepreneurs in the Artistic category prefer to mention themselves more than the entrepreneurs in the Technological category. We find that experience in Kickstarter drives mentions higher. Furthermore, entrepreneurs whose last fundraising attempt in Kickstarter turned successful mention their names significantly more in the 'About' section ($0.826 > 0.71$) and in the first 100 words ($0.34 > 0.28$). Moreover, the higher the funding goal, the more the entrepreneur's name is mentioned.

With respect to defining the success of the funding campaign, we use three different measures of success. The first, and probably the most important measure in this context, is the success in reaching the funding goal which is estimated as a binary variable that equals 1 if the project managed to raise enough funds to match the original goal, and as a result, received the funds. For this type of project, the ability to fund the project will probably determine the "life or death" of the project. The second is the percentage pledged calculated by dividing the sum pledged by the total goal. In Kickstarter entrepreneurs cannot raise less than their goal, and during the period of investigation, very successful projects managed to raise substantially more than their

original goal (on average, successful projects raised 7,234\$, 40% more than their average goal). The third is the number of investors who funded the project. Regardless of the measure of success that we use, the mentions of the entrepreneur's name matter while we control for the type of project, the previous success of the entrepreneur, the size of the funding goal, the total amount of words in the 'About' section, and the location of the venture. We also document that in the multivariate analysis, the probability of reaching the goal is significantly negatively related to the technology projects, even after controlling for the goal, and is significantly negatively related to the size of the goal. Previous success of the entrepreneur is not statistically significant.

Our paper contributes to the academic literature that discusses the contribution of two of the firm's major assets – human and non-human capital, and investigates their relative importance to the success of a firm.⁴ The most related financial economics academic work to this paper is the literature that investigates the “horse versus jockey dilemma”, a term coined by Kaplan, Sensoy, and Stromberg (2009). Even though this dilemma is of vast interest in academia, and has practical implications, the empirical financial economics literature that investigates it is not extensive. A possible reason for this is that it is very challenging to find a large and representative sample of investment decisions combined with all the information that was submitted to the investors and their comments. Furthermore, in order to investigate this dilemma, one should define what is the “success” of a venture and how to quantify it. Kaplan, Sensoy, and Stromberg (2009), examined the life cycle of 50 VC-financed start-up companies in the United States. They found that while the leaders of most startups were replaced after several years, most of the core ideas of the firms had not changed, therefore concluding that investors in start-ups should place more weight on the business (“the horse”) than on the management team (“the jockey”). Marom (2012) investigated the same dilemma, using a large database of 185 Israeli start-ups business plans, verifying the results of Kaplan et al. (2009), while also highlighting factors of influence such as natural causes, industry related dynamics, and intellectual property presence. Our work contributes to this existing literature by estimating the horse versus jockey dilemma in a leading Crowdfunding platform, while studying large amounts of projects, and focusing on very

⁴ e.g. Rajan and Zingales (2001) and Penrose (1959).

early stage initiatives (seed money). We find that entrepreneurs indeed present themselves differently across categories and based upon their prior entrepreneurial experience. On the other hand, investors take action upon the information presented by the entrepreneur, and this affects the success of the funding campaign. Lastly, our project provides evidence that supports what many practitioners claim – the entrepreneur’s description does matter – investors invest in people.

Finally, our paper also contributes to the literature of early state financing in general, and crowdfunding in particular. We present one of the first in depth financial economics analysis of the leading reward-based crowdfunding platform, and address issues that could be relevant to other crowdfunding mechanisms and potentially even other entrepreneurial finance alternatives. Little research has been conducted in the crowdfunding field. Lambert and Schwienbacher (2010) looked into the various reasons a project, which uses a crowdfunding platform, has in order to raise funds. Agrawal, Catalini and Goldfarb (2011), investigated the distance & social related drivers in Sellaband⁵ and found a reduced role for proximity between crowdfunding investors and entrepreneurs, but a strong geographic effect by investors who likely have a personal connection with the entrepreneur. Through various case studies conducted on Kickstarter projects, Nedeski (2011) shows a connection between a project's success and its engagement with both potential and actual contributors. Mollick (2013) uses a similar technique to ours in order to obtain his dataset and present a similar mapping of Kickstarter, while looking for success and failure determinants. His interesting results shed light on drivers for successful fundraising, mainly regarding personal networks and general quality signals. He also finds major delays in project deliveries but most importantly, little, if any, outright fraud.

Following this introduction, the paper proceeds as follows – Section 2 describes the Crowdfunding mechanism, introduces the Kickstarter platform, and elaborates about the dataset and its general attributes. Section 3 presents the quantification method and its validity. Section 4 presents the factors that affect the entrepreneurs' descriptions and Section 5 the factors that affect the success of the funding campaign including the

⁵ www.Sellaband.com – a crowdfunding platform dedicated for music projects funding.

entrepreneurs' description. Section 6 presents the robustness tests, and Section 7 concludes.

2 Crowdfunding, Kickstarter Market Structure and the Data Description

2.1 Overview of Crowdfunding

Crowdfunding is an innovative funding mechanism which leverages the internet and social networks in order to raise funds from a large number of investors, usually raising small amounts from each investor. The progress in technology, made during the last decade, enabled the wide spread of crowdfunding by using the ability to quickly and efficiently transfer data and payments. Crowdfunding enables the entrepreneur to reach out to an undefined large number of investors, in addition to circles of family and friends. Crowdfunding started mainly from the creative arts, and today it is widely used by entrepreneurs from various disciplines, for example - technology, art, social initiatives, and personal funding needs. Crowdfunding may be used to get seed financing for a firm initiating, manufacturing and distribution of a product, fulfillment of an artistic project, medical treatment, and many other forms of projects, initiatives and causes. Shwienbacher and Larralde (2010) elaborate on the definition, evolution and key aspects of this funding mechanism. Massolution, a research company that specializing in crowdfunding, indicated that as of April 2012, there were 452 crowdfunding platforms active worldwide. Massolution collected data from about 170 platforms, and during 2011 they collectively raised 1.5 billion dollars and funded more than one million campaigns, and during 2012, the crowdfunding industry grew to an overall estimation of 2.7 billion dollars investments. The largest markets in crowdfunding are in North America and Western Europe.

Crowdfunding describes several co-existing market types - Bradford (2011) categorizes crowdfunding into five types, distinguished by what investors are promised in return for their contributions:

- (1) The reward model;
- (2) The pre-purchase model;

The reward and pre-purchase crowdfunding models are similar to each other, and often appear together on the same sites. The reward model offers something to the investor in return for the contribution, but without interest or part of the earnings of the business. The reward could be small, such as a key chain, or it could be something with a little more cachet, like the investor's name appearing in the credits of a movie.

The pre-purchase model is similar in nature, whereby contributors receive the product that the entrepreneur is making. For example, if the entrepreneur is producing a music album, contributors would receive a copy of the album.

(3) The lending model: The model is based on a loan. Contributors are only providing the funds temporarily and repayment is expected. In some cases, investors are promised interest on the funds they loan. In other cases, they receive only their principal back.

(4) The equity model: Equity crowdfunding offers investors a share of the profits or return of the business they are helping to fund.

(5) The donation model: Investors receive nothing in return for their contribution. Although the contributor's motive is charitable, the recipient's need not be.

2.2 Market Structure - Kickstarter

Described by the New York Times as “a new model for DIY⁶ generation”, Kickstarter is one of the world’s most prominent crowdfunding platforms⁷. Kickstarter is acting as an intermediary between entrepreneurs seeking funding, and potential investors (projects’ backers), using a reward based crowdfunding mechanism. Kickstarter, like most crowdfunding platforms, aims to fund a specific project, i.e. a musician's album recording or the publication of a graphic novel. Kickstarter provides clear guidelines for what constitutes a project, stating: “*Funding for projects only. A project has a clear goal, like making an album, a book, or a work of art. A project will eventually be completed, and something will be produced by it. A project is not open-ended. Starting a business, for example, does not qualify as a project.*”

⁶ DIY = Do It Yourself

⁷ <http://www.kickstarter.com>

Since its inception in 2008, Kickstarter has accounted for more than 20,000 successfully funded projects, and attracted over 1.5 million investors, contributing over 175 million dollars. Figure 1 shows a constant positive trend in the number of projects per month, the mean goal set per project, and the mean amount pledged by the successful investments, from the first month of activity of the site until today.

[Insert Figure 1 here]

Initial fundraising through crowdfunding can help start-ups grow, perhaps even presenting an alternative to the current seed funding solutions, like Angel Investors, VCs, or governmental support. For example, Touchfire, a company offering a typing device for the iPad, is now an established firm and allots much of their initial success to the Crowdfunding model, stating: *"Touchfire started out as a Kickstarter project. Kickstarter is a crowd-funding Web site that enables people to help bring promising new products to life. Touchfire ended up raising over \$200,000. Our entire first production run will be allocated to Kickstarter backers."*

The projects featured on Kickstarter belong to 13 predetermined (by the platform) categories, each featuring its own section and sub-categories, which range from artistic projects (i.e. music, film, or art), to technological projects (mostly product design and gadgetry). Kickstarter utilizes an "all-or-nothing" funding mechanism. Entrepreneurs receive funding only if they reach their funding goal within the allotted investment time frame. If the investment goal is not reached within the allotted time frame, funds are then returned to the investors. Even if the project fails, Kickstarter retains 5% of the raised funds as commission.

Kickstarter lists the guidelines which new projects must follow in order to begin the funding process:

- The project must fit into one of the predetermined 13 categories.
- The funding is for projects only, with a clear goal and an ending date.
- No charities and causes are allowed.
- No personal benefits such as funding of vacation or university tuition fees are allowed.

- No Projects that fall into Kickstarter's prohibited items category, such as alcohol, electronic surveillance equipment, weapons, pet supplies, real estate, and more.
- Projects in the Technology and Design categories must follow additional guidelines, for example software projects must be run by the developers themselves, even if they are open sourced.

Joining Kickstarter, entrepreneurs are required to provide a project overview, a funding goal and timeframe for investment (1-60 days), and a tiered-rewards system for investors. Entrepreneurs are strongly encouraged to provide their personal history, a history of the project, as well as videos and other supplemental media. The entrepreneur provides the potential investor a menu that discusses what he or she will receive for different levels of investment. These menus usually start at the bare minimum of several dollars and increase to a level which depends on the type of investment.

2.3 Data

Our database consists of 4,304 ongoing projects, 16,641 successful projects, 4,128 failed projects, 22,274 entrepreneurs, 1,108,233 investors, and investments that sum up to more than 120 million dollars. The period investigated in this project is three years, from the inception of Kickstarter, in April 2009, up until March 2012. After mapping out the structure of the website in detail, we used custom made software in order to download the relevant data during March 2012. All textual data from the available projects on the site have been downloaded, as well as data about the creators of the projects and investors, covering over 1.1 million users. It is important to note that Kickstarter offers direct access only to projects which are still raising funds or successful projects – and not to the failed ones. We bypass this limitation by using the list of links to projects that the funders have invested in and collecting the same information from them as well, via our custom made software. Some of these projects are actually failed projects, meaning we managed to download a substantial amount of failed projects, implementing a multi-stage downloads process. As a result, our database consists of all successful projects and all those failed projects which have

received at least one investment by an investor which funded a successful or an ongoing project in our database⁸.

According to the official Kickstarter statistics⁹ the success rate is 44%, while in our dataset we can view only a 20% failure rate. This bias could be explained by more than 10,000 projects which were not funded at all, and therefore does not have implications on our findings. These projects would probably be screened out of our dataset even if we could gather them, due to the nature of projects – that they did not even receive any investment at all - and could potentially bias our results.

To be eligible to initiate a Kickstarter project, one must be a US resident. Given that, it is not surprising that 94% of the projects are based in the US¹⁰. The residence requirement does not apply to the investors. Only 15% of the investors in our sample state their country of residence, and the vast majority of those that declare it (79%) are from the US¹¹. The average requested funding (funding goal) in our sample was \$8,026 (median equals to \$3,000, max equals to \$21,474,836). While the average requested funding for successful project was \$5,125 (median equals to \$3,000), on average 41% more than the goal set was raised. A successful project attracted an average of 99 investors (median 51), while the failed projects received interest only from an average of 19 investors (median 9). The sets' variables used to describe each project are available in Appendix A.

It is interesting to see the average investment pattern over time on average per project - Figure 2 illustrates the average new investors that funded a project every week,

⁸ Only in cases where the project failed, and did not receive any requests for funding from any known investor in our database, we are unable to locate the URL of this project.

This may cause underrepresentation in the data of failed projects (of the very unsuccessful projects) mainly from the first years of activity of Kickstarter. We did robustness tests on sub samples of our data and found that our main results hold.

⁹ <http://www.kickstarter.com/help/stats>

¹⁰ Since our extraction of the data, Kickstarter opened the possibility for UK residents to start projects as well.

¹¹ Other investors are from Canada (4%), Australia (3%) and the UK (3%). The rest are mainly from EU countries.

comparing projects that eventually succeeded in reaching their goals to those which failed. Successful projects attracted approximately 3 times more new investors and also retained a higher amount of new investors until the end of the fundraising campaign.

[Insert Figure 2 here]

The fate of the project seems to be determined during its first week, as the number of investors of the successful projects is significantly higher. The projects then become popular and hyped up, and success leads to success. 90% of the projects' funding ends after week 9, which explains the drop from week 10 onwards (Figure 2).

All Kickstarter projects are divided into the following 13 categories: Art, Comics, Dance, Design, Fashion, Film, Food, Games, Music, Photography, Publishing, Technology, and Theater. These categories can be grouped into three main categories: Artistic projects, Gaming projects and Technological projects. We will divide the different projects in to these 3 group results for the following reasons: first, the artistic projects tend to offer physical products as a reward for investing in a project. Second, for those projects which fall under the 'Design' or 'Technology' categories, the entrepreneur is required to provide additional information to Kickstarter during the application process. Kickstarter requires a detailed resume from the entrepreneur and in the case of hardware projects; the entrepreneur must supply a detailed manufacturing plan. In addition the entrepreneur must provide a functioning prototype of the product. Projects classified under the 'Games' category are not required to produce the aforementioned information, as their reward system is similar to the system in the 'Technology' category, we placed these projects in their own sub-category.

The differences between the main categories are reflected in Table 1. The technological projects set their goals significantly higher than the artistic ones (12,786 > 6,678), and although they make for a mere 5.13% of the number of projects on the site, they account for 17.1% of the funds pledged. Projects in the gaming category set their goals even higher than the other categories, averaged at \$43,910, and their funds pledged also account for a higher share than their share of projects on the site. The artistic category is dominated by music and film/video projects, and makes up for the majority of the projects on the Kickstarter site (which describes itself as a platform for creative projects). The mean of goal set in any of the artistic categories is significantly

lower than those in the gaming and technological categories, as well as the mean of sum pledged.

[Insert Table 1 here]

3 Quantifying the Entrepreneurial Pitch

3.1 Quantification Method

The page of a particular project on the site is Kickstarter's equivalent of a common start-up's business plan and investment presentation. This is where the entrepreneurs are pitching their idea in order to raise funds. The Kickstarter platform provides the entrepreneurs with five potential spaces which they can use for their presentation:

1. Basics: Project title, location and overall funding goal.
2. Video or photo.
3. "About" section – textual presentation of the project and/or the entrepreneur.
4. Perks – the possible sums of funding and their relative rewards.
5. Entrepreneur's section – basic details and self-description.

While attempting to estimate the presentation of the entrepreneur in the pitch, we focus on the 'About' section, where we can easily observe the differences among different presentations. Written by the entrepreneur, the text in the 'About' section describes the project, and also takes up the majority of the space on the page. Although the entrepreneurs have separate profiles where they describe themselves, many entrepreneurs upload their resume and introduce themselves in the 'About' section as well. Although the space given for description in the section is not limited, the readers' capacity is, and the entrepreneur must make the best use of this section to highlight what's important.

It is not trivial to evaluate the relative description of the entrepreneur versus that of the project, and we chose three methods, which are based on text mining, in order to do so. The variable that we used to quantify this choice is the entrepreneur's name. To illustrate the different methods utilized by entrepreneurs, with respect to the use of

their name, we took screen shots of the first pages of two different projects, both in the Comics category. The first (figure 3a) is a project by Daniel Johnston, a well-known songwriter. Daniel's name is mentioned in the project's title, four times in the first two paragraphs of the 'About' section, and once in the description of the perks. For a user visiting the project's page, he/she will be unable to miss the name of the creator.

[Insert Figure 3a here]

The alternative approach is demonstrated on Richard Ankey's project page (figure 3b), where his graphic novel is described. When a user enters Richard's project page, he will see the creator's name mentioned once, in the mandatory username field. Ankey's name is not mentioned in the 'About' section; instead, he uses the space to describe the plot of his novel and future plans for the series.

[Insert Figure 3b here]

Our main text mining approach is as follows - we count the number of times the entrepreneur's name is mentioned in the 'About' section, to measure the extent to which the entrepreneur chose to present him/herself in the description of the project. Entrepreneurs are divided into three types when choosing the author name that appears on their project page: 1. Individual name of the entrepreneur, in the case that there is only one entrepreneur or one that is very dominant; 2. Multiple names of entrepreneurs; 3. An organization name (a band, a company, a group, etc.). For the 1st and 3rd types, we identified the name in the text and counted how many times it appeared. For the 2nd type, a group of several individuals, in order to maintain a consistency and compare and contrast with the former types, we isolated the first individual name, and counted it.¹² Our conjecture is that the more the entrepreneur's name is mentioned, the more emphasis is placed on his/her skill, past experience and past success.

We use two other methods as additional measures. In the second method we tracked the number of self-mentions in the first 100 words of the "About" section only, being

¹² Section 3.2 describes additional tests that demonstrate that our results are robust to the choice of which specific entrepreneur out of the group we count.

the equivalent of the first page of the business plan, the most important part of the section. In the third method we checked whether the entrepreneur was mentioned in the title of the project. Table 2 reports the summary of the three measuring methods. We learn that in all three measures the average of mentions is higher for the successful projects than the failed ones. Also, there is a significant positive correlation between the three methods. The correlation between the first measure (All of the About Section) and the second (just the first 100 words of that section) is 0.673. Between the first and the third (a mention in the title of the project) the correlation is 0.339, and the correlation between the second and the third is 0.365.

[Insert Table 2 here]

In the next sections we will describe several robustness tests that were conducted in order to answer potential challenges and biases.

3.2 A group of entrepreneurs

In less than 5% of the projects we encountered a team of entrepreneurs stated in the "About" page. It seems that although many of the projects were founded by a team, most of the groups decided to present, or highlight, only the leader's name or the group's name. Due to the nature of the presentation we decided to measure the mentions of the first entrepreneur only. In order to assess whether or not counting the first entrepreneur mentioned is similar to counting any other entrepreneur from the group; we isolated the 2nd name, and employed the same quantification measures.

Table 3 reports the results - we can see clearly that the mentions of the second name behave exactly as the total sample (as presented in Table 23): in all three measures, the successful projects mentioned the entrepreneur more than the failed ones did.

[Insert Table 3 here]

We further checked for any difference in the number of mentions between the 1st and the 2nd name. We focused on the sub-sample of projects with two entrepreneur's names, and conducted t-tests for any differences in the number of mentions. None of the differences in the three measures came out significant. However, these tests showed

a high correlation of mentioning both entrepreneurs, and therefore we decided to report the results of the measure when we use only the mentions of the first entrepreneur's name, while the results are consistent with the other choices.

3.3 Human coding verifying the text mining methods

As mentioned earlier, our text analysis method may face two different challenges. The first challenge is related to the text mechanism procedure, it has to do with the fact that our counting method ignores such cases as referring to the entrepreneur in the third person, with a nickname, or first name only. Also, our measure does not take sentence interpretation into account. Hence, it could be argued that a mention count could be biased if long paragraphs, telling the entrepreneur's story, would include only one mention, and on the other hand, a short paragraph about the entrepreneur could include a few mentions. The second challenge has to do with the objective of this paper. One may argue that finding many mentions of the entrepreneur's name does not necessarily mean that the project's idea is not thoroughly described as well.

In order to evaluate the potential effects of these challenges on our documented results, we conduct a human coding robustness test that will enable us to validate the strength and validity of the text mining method. Our human coding test is very similar in its spirit to the human coding methods that were initially used in Ravina (2008) and later in the research work of Duarte et al. (2012). The main purpose of the test was to ask human raters to evaluate entrepreneur pitches that were part of our sample, and to rate them on a scale – emphasis on the entrepreneurs vs. the business idea.

We conducted an experiment with the participation of 100 technology oriented workers and managers from a large high-tech organization. We picked a heterogeneous group, with different business administration degrees, in order to control for their backgrounds. All of the reviewers had a technology education, while some of them were also students or MBA graduates. 62% percent of the reviewers were men, and more than a half were MBA graduates. We did not find any variance in the results due to the different backgrounds, gender or education.

Overall, we rated 100 entrepreneurial pitches from technology and art categories; 50 from the Technology category and 50 from the Dance category. We classified the projects using the text mining method to quadrants of mention counts, in order to make sure that we had a large enough variation in the number of mentions in the pitches to be rated by the group. We then randomly picked 100 projects from the top and bottom quadrants of each category. Each entrepreneurial pitch was rated by 5 reviewers, meaning we had a total of 500 ratings. Each rater received a short textual and oral introduction about Kickstarter and was asked to rate 5 entrepreneurial pitches with 3 questions where the answer was a number on a scale from 1 to 7 (the full questioner appears in appendix 8.2).

The first question (Q1) scales the relative emphasis between the project and the entrepreneur, and the two other questions examine the weight of each ingredient – entrepreneur (Q2) and project (Q3).

The human raters' results support our name counting technique. Q1 answers contributed to the general understanding that the mention counting is indeed viable, and significantly correlated to the human perception of the business pitches. Its results verify our text mining mechanisms, as it approves the similarity of human perception to the self-mention counts. Once we compared the results of Q2 with the number of mentions of the entrepreneur in the 'About' section, we found a clear, positive, and significant relation (0.54) between the two measures (Figure 4). Also, as expected, the negative (-0.29) correlation between the answers of Q3 and the number of mentions, indicated that the less the entrepreneur is mentioned, the description of the actual project idea was relatively highlighted and discussed in depth.

Figure 4 illustrates the correlation we found between the human coding and the text mining technique. The increase in the level of the emphasis on the entrepreneur, as perceived by those surveyed, is reflected in our measure – the increase in the number of mentions.

[Insert Figure 4 here]

The results are straight forward and support our text mining mechanism. We verified that these results were independent of the category of the project, by comparing projects from the top quartile of mentions to the low quartile – in each category separately. The results are shown in Table 4 and match the expectations. When the number of mentions of the entrepreneur is high, the entrepreneur is perceived to be more highlighted in the project page than the project's idea, both in the Dance and Technology projects.

[Insert Table 4 here]

Our experimental results show that both potential arguments against our text mining technique were validated as unsubstantiated. With regard to the first argument (counting biases), the highly positive correlation found between the number of mentions and emphasis on the entrepreneur (Q2), indicates that although we surely missed some self-references, the text mining technique is consistent with the human perception.

As for the second argument (counting affectivity), we found a negative correlation between the number of entrepreneur mentions and the level of emphasis on the project idea (as asked in Q3) – the more times the entrepreneur was mentioned, the less the people were exposed to the idea of the project. We can attribute this to the limited attention of every person who is given a pitch of any kind - focusing on one thing takes focus from the other.

It is important to note that the answers are consistent across the rates. The Cronbach alpha measures the correlation between all raters and is widely used in the literature to measure whether ratings from different individuals produce similar results. Our result, 0.9146, validates the internal consistency or reliability for our sample of raters

4 Entrepreneurial Pitch and Mentions

In this chapter we will analyze the decisions made by the entrepreneur regarding the design of the business pitch.

4.1 Factors that affect the number of mentions

4.1.1 Past experience and prior success

The serial entrepreneurship literature indicates that past experience matter. Packalen (2007) argues that a company's legitimacy is largely based on previous achievements of its founders, especially in the early stage where these could serve as one of the only signals. Hsu (2007) shows that serial entrepreneurs are more likely to obtain venture finance, but also that they obtain better valuations. Zhang (2011) argues that entrepreneurs with prior firm-founding experience are expected to have more skills and social connections than novice entrepreneurs. Such skills and social connections could give experienced founders some advantage in the process of raising venture capital. Compared with novice entrepreneurs, entrepreneurs with venture-backed founding experience tend to raise more venture capital at an early round of financing, and tend to complete the early round much more quickly. These arguments were analyzed with a VentureOne dataset (1992-2001). Gompers, Kovner, Lerner and Scharfstein (2009) focus on the differences between entrepreneurs with a track record of success and novice entrepreneurs, or entrepreneurs who have previously failed. They find that the previously successful entrepreneurs are more likely to succeed, thanks to their perceived market timing skills by suppliers and customers. Paik (2010) examines VC-backed companies in the US semiconductor industry and finds that serial entrepreneurs have lower success rates than first-time entrepreneurs. However, he finds some evidence of learning, where serial entrepreneurs seem to be able to survive for longer.

We compare the effect of previous success versus previous failure, or novice entrepreneurs. It is important to notice that we relate to the experience in Kickstarter projects only. Entrepreneurs whose last fundraising attempt in Kickstarter turned successful mentioned their names significantly more in the 'About' section

(0.826>0.71) and in the first 100 words (0.34>0.28).Next we count the number of mentions for each number of projects (Panel 5a) and number of successful projects (Panel 5b).

[Insert Table 5 here]

The table shows clearly that entrepreneurs that had previous projects on Kickstarter tend, on average, to mention their names more in all three examined sections (about, first 100 words, title). Even more, the average self-mentions grow with each previous project, whether it was a success or a failure. The results are consistent with the theory mentioned above, regarding the legitimacy and perceived advantages of serial entrepreneurs, who emphasize their background as a vital signal to potential investors.

4.1.2 Industry

The projects in our dataset vary across different categories, and therefore present different types of entrepreneurs and potential investors. It has been questioned whether the importance of the human capital, as compared to the non-human capital, is similar across different industries. Thomas (1988) compared multiple industries competition to a car race with different roads (industries), in which cars (companies) and drivers (CEOs) are competing. He argued that organizational constraints are constant across samples, thus exploring the effect of CEO in one industry only. Other researchers, who tested the CEO's effect on the company's success, left out the industry-level effects, and examined the CEO effect at the aggregated level only (Weiner, 1978; Weiner and Mahoney, 1981). This concept is contrary to the work of Wasserman, Nohria and Anand (2001), which By empirically analyzing the importance of CEOs to variations in performance across organizations and industries, show that CEOs have much more impact in some industries than in others. This is due to characteristics of the external environment, such as industry structure and competitive dynamics. Paraphrasing Thomas (1988), they argue that CEOs in different industries are driving different cars, while in several industries the speed could be higher and the roads may be uphill or downhill, unpaved or paved. In their aforementioned paper, Kaplan, Stromberg and Sensoy (2009) find differences in the rates of business ideas changing between biotech and non-biotech firms, as well in characteristics of leadership changing. Marom (2012) shows that industries with lower entry barriers are

more prone to change their lines of business and therefore only a small percentage of their projects outlive the founders.

As discussed earlier, the projects featured on Kickstarter are divided into 13 separate categories, which, for the purposes of this paper, we have divided into three main categories: Artistic Projects, Gaming Projects, and Technological Projects. Table 6 shows the mean number of times an entrepreneur's name is mentioned in the 'About' section, in the first 100 words of the section, and in the title of each category. The mean number of times a name is mentioned in the Artistic category is 0.728, and is significantly higher than the Technological category, (averaging 0.506), suggesting the entrepreneurs in the Artistic category prefer to mention themselves more than the entrepreneurs in the Technological category. This may be a testament to the nature of their projects, suggesting that while the creator of the technological project can present a prototype of the product, a screenwriter is more likely to focus on his/her past works or resume, since the play/film has not yet been produced and is not as tangible as a technological prototype. Another potential explanation could be the importance of the specific entrepreneur in the artistic disciplines, and the centrality of the performing artist.

As a robustness test to these results, we compared the experiment human rating results of the Dance projects to those of the Technology projects, using t-tests to check the statistical differences. The results strongly verify our assumptions - the answers indicated that creators of the dance projects were perceived as highlighted more than technological inventors and the technological projects' ideas were brought out much more than the Dance projects' concepts.

[Insert Table 6 here]

By comparing the number of mentions in a project page to those in the entrepreneur's previous project, and then separating them by the categories, we are able to take a closer look at the process of self-mentioning. The results indicate that the artists increase the number of self-mentions after a successful project (+0.08), and increase self-mentions by (+0.1) after a failure. For the entrepreneurs in the Artistic category,

there is a blatant understanding that number of mentions is an important factor in artistic projects. The tech savvies increase the number of mentions after a successful project too (+0.14), but unlike the artists, if their last project was a failure, they decrease the number of mentions (-0.05) and instead focus the spotlight on the project alone.

4.1.3 Funding Goal

As an inherent part of the mechanism, entrepreneurs define a funding goal in the beginning of each crowdfunding campaign. The goal is crucial due to Kickstarter's "all or nothing" method, that was discussed earlier. Our conjecture is that a higher funding goal requires some elaboration on the entrepreneurial team. It is very reasonable to believe that a project that aims to raise a large amount of seed funding, will have to present a strong team with proven execution experience or capabilities.

Examining the self-mentioning against the goal shows a clear pattern. As expected, it demonstrates a steady rise in the number of mentions as the entrepreneur attempts to raise more money, from 0.496 in the first goal decile to 0.853 in the 10th (illuminating a significant difference between the two), with a steady rise between them. The other two measures, mentions in title and in first 100 words, seem to identify fewer mentions in the higher goals, which may be a result of the high proportion of technological projects to high goals.

As demonstrated earlier, since the category is correlated with the goal, we also verify the aforementioned relationship by investigating the relative goals in each category - most results are consistent with earlier findings - that the higher the goal, the more the entrepreneur's name is mentioned. Furthermore, all of the means in the >150% portion (relative to the categories' goal mean) are significantly higher than those of the <50%.

4.1.4 Video

Entrepreneurs on Kickstarter are advised to add a visual illustration of their initiative, in the form of an image or a video. Most of them (about 82% of our sample) indeed choose to do so, in order to improve their funding probability. The impact "entrepreneurial passion" and general preparedness have on the investor is central in

understanding the extent to which the investor may be affected by the general traits or personality of entrepreneur (e.g Chen, Yao, and Kotha (2009),

Cardon, Sudek, and Mitteness (2009) And Cardon, Sudek, and Mitteness (2009)

In our sample, projects that feature video also have a tendency to mention the entrepreneur's name more frequently. As such, the means of mentions are higher in all three measures. The most significant change is the mention in the about page – the mean in pages with videos is 0.755 mentions, while entrepreneurs that don't present a video self-mention themselves only 0.528 times in the stated section.

4.1.5 Patents

In the technological category, we have identified 123 projects who state in their 'About' section that the espoused technology is either patented, or patent-pending (at the very least). The mean goal of these projects is more than 25,000\$, while the other 936 projects, which didn't state they have a patented technology in their about page, tried to raise a mean of approximately 11,000\$. Yet the number of mentions in the text or in the title is not significantly different between these projects.

4.2 Multivariate Analysis

In order to evaluate what affected the number of mentions, we estimate the following models for each project i and entrepreneur j :

1. Number Of Mentions $_{i,j}$ = $f(\alpha_1 \text{ dummy(Technology)}_i + \alpha_2 \text{ Goal}_i + \alpha_3 \text{ PreviousSuccess}_j + \alpha_4 \text{ dummy(Video)}_i + \alpha_5 \text{ TotalWords}_i + \alpha_6 \text{ dummy (Website)}_i + \alpha_7 \text{ dummy (USA)}_i) + \epsilon_i$
2. Number Of Mentions In first 100 Words $_{i,j}$ = $f(\alpha_1 \text{ dummy(Technology)}_i + \alpha_2 \text{ Goal}_i + \alpha_3 \text{ PreviousSuccess}_j + \alpha_4 \text{ dummy(Video)}_i + \alpha_5 \text{ TotalWords}_i + \alpha_6 \text{ dummy (Website)}_i + \alpha_7 \text{ dummy (USA)}_i) + \epsilon_i$
3. Number Of Mentions In Title $_{i,j}$ = $f(\alpha_1 \text{ dummy(Technology)}_i + \alpha_2 \text{ Goal}_i + \alpha_3 \text{ PreviousSuccess}_j + \alpha_4 \text{ dummy(Video)}_i + \alpha_5 \text{ TotalWords}_i + \alpha_6 \text{ dummy (Website)}_i + \alpha_7 \text{ dummy (USA)}_i) + \epsilon_i$

Whereas:

- NumberOfMentions = Number of mentions in the 'About' section.

- `NumberOfMentionsIn100Words` = Same as `Mentions`, but scans the first 100 words in the 'About' section only.
- `NumberOfMentionsInTitle` = Receives the value of 1 if the entrepreneur is mentioned in the title of the project, 0 otherwise.
- `Technology` = Equals to 1 if the category of the project belongs to the Technological main-category, 0 if to the Artistic main-category.
- `Goal` = Log of the goal of the project in \$.
- `PreviousSuccess` = The number of earlier successes the entrepreneur had in the Kickstarter platform.
- `Video` = Equals to 1 if the entrepreneur put up a video on the project's page, 0 if not.
- `TotalWords` = Log of the total number of words in the 'About' section.
- `Website` = Equals to 1 if the user provides a website link, 0 otherwise.
- `USA` = Equals to 1 if the project is based in the USA, 0 otherwise.

[Insert Table 7 here]

Equations were estimated using OLS, Poisson regression (as we count the number of mentions), and using Tobit regression (given that our sample is truncated at zero).

The negative and significant coefficients of the Technological variables indicate that the projects in the 'Technological' categories are less likely to mention the entrepreneur in the title and in the 'About' section of their project's page. This coefficient is stable across all regressions, including OLS, Poisson and Tobit. Our results suggest that entrepreneurs in different industries present their projects differently. In addition, previous success coefficients are positive and significant, confirming the hypothesis regarding the self-mentioning of serial entrepreneurs. Other variables remain coherent with their univariate results. The number of mentions is positively correlated with the goal, video presence and number of previous successes.

5 Measuring and Estimating Success

After the examination of the different drivers for self-mentioning, the natural next step is to examine the determinants for success, especially regarding the entrepreneurs' mentions.

5.1 Factors that affect the likelihood of success

The following three variables were utilized in order to measure whether or not a project was successful:

1. Success in reaching the funding goal – a binary variable that equals 1, if the project managed to raise enough funds to match the original goal, and as a result, received the funds.
2. % Pledged – Dividing the sum pledged by the goal.
3. Investors – Number of investors who funded the project.

The aforementioned measures check the final outcome, not the dynamics of the funding process. In order to identify the factors linked to a successful fundraising initiative, we cross-section these measures with variables of the project's presentation.

5.1.1 Industry

Different industries attract different kinds of entrepreneurs and investors. It is interesting to analyze the difference between them, in respect to funding goals and results. We find that the chances for an artistic project to reach its goal (0.814) are significantly higher than their technological rivals (0.637). The gaming category is situated between the artistic category and the technological one (0.658)¹³. Table 8 presents the different categories by our measures of success.

[Insert Table 8 here]

¹³ It should be noted that as a result of extraction limitations, the reported rate of success is probably higher in our paper than in reality as we only include failed project which received funding (but did not reach their goal). However, this potential bias is not correlated with specific category.

These findings are partially explained by the mean goal. Since the technological projects set significantly higher goals than the artistic projects ($12,785 > 6,678$, significant), the technological projects find it more difficult to raise enough funds to meet the goals of their projects.

The gap in the mean of the goals may be clarified by the next column – the mean of the share of the sum pledged out of the goal. Interestingly, although the chances of success for the technological categories are lower – the mean of % pledged is higher. This is due to a minority of projects which enjoyed very high pledging (over 1000%). These successes might have increased the expectations of other projects in the technological categories. This trend is seen in the “number of investors” variable as well, which is significantly higher for the technological categories.

5.1.2 Funding Goal

We examined the correlation between the fundraising goal and the projects' success. The higher the goal, the lower the chances for the project to reach that goal - from 89% chance for the lowest 10% of goals, to 54% chance for the highest 10% of goals. Respectively, the mean of the percentage pledged also drops (from 16.4 to 0.8), while the mean of the number of investors steadily rises from 21.2 to 277.8 investors for projects in the top decile.

We verified this finding by analyzing the goal differences within the categories, relatively to each category's goal mean. The results confirmed our prior findings – chances of success started from 84% with 45 investors when the projects' goal was less than 50% of its category mean goal, and reached 66% with 190 investors at more than 150% relatively to the category mean.

5.1.3 Video

Most of the entrepreneurs (82%) present a video in their 'About' page, and this decision proves to be beneficial. Entrepreneurs that include videos on their page tend to be more successful - their chances of success (81.4%) and number of investors (91.6) are significantly higher than projects that do not feature a video on their project page.

5.1.4 Past experience and Past success

Surprisingly, a serial entrepreneur at Kickstarter, that had a successful project at Kickstarter, does not have higher chance to reach the funding goal on a new Kickstarter project (80%) compare with novice entrepreneurs (81%). One reason for this finding may be related to the level of the new goal that is usually set to be higher in post-success projects. Nevertheless, if the previous project was a failure, the chance of success drop to 50%. Serial successful entrepreneurs enjoy on average larger number of investors (113) compare with novice entrepreneurs that have on average 83 investors and serial entrepreneurs that their last project failed that have on average 42 investors.

This may suggest that the entrepreneur holds credibility within a group of returning investors from her last Kickstarter campaign.

[Insert Table 9 here]

The results that are presented in Table 10 might suggest that investors are aware of the past successes of the entrepreneur. While there is ambiguity surrounding the effect of the number of previous projects of the entrepreneur on the chances of current success, the effect of the number of previous successes is very clear. The chances rise from 51% for novice entrepreneurs to 80% for those with a minimum of three successful funding processes featured on their resume.

5.1.5 Patents

We investigated the effects of holding a patent on success measures in the technology category. While the number of self-mentions is unaffected by the patents, the number of investors is positively and significantly affected when a patent is mentioned (521 when 'patent' is mentioned and 231 when the word 'patent' is not present in the 'About' page). However, results show that there is no significant difference in the chance of success. This may potentially be due to the facts that the goals in this case are much higher.

5.1.6 Number of Mentions

Without controlling for other variables, we first tested the effect of the number of mentions in the 'About' section of the project. Out of approximately 20,000 projects there are more than 12,500 projects in which the entrepreneurs did not mention themselves at all, 4,700 that mentioned themselves only once, 1,700 that mentioned themselves twice, 600 mentioned themselves three times, 320 mentioned themselves four times and 17 mentioned themselves 10 times. We did not find a correlation between the number of mentions and the three measures of success, possibly due to fact the self-mentions effect is most likely not linear, and controlling for other variables may play an important role as we previously documented these relationships.

5.2 Multivariate Analysis

We wanted to examine the determinants of success and failure, based upon the findings above. The following regressions were utilized to test the effects of the project presentation variables on our success measures¹⁴.

4. Probability of reaching the goal for project i by entrepreneur j :

$$\Pr(\text{Success})_{i,j} = f(\beta_1 \text{Technological}_i + \beta_2 \text{ThreeMentions}_j + \beta_3 \text{Goal}_i + \beta_4 \text{PreviousSuccess}_j + \beta_5 \text{Video}_i + \beta_6 \text{TotalWords}_i + \beta_7 \text{Website}_i + \beta_8 \text{USA}_i + \varepsilon_i)$$

5. Percentage of sum pledged out of the entire goal:

$$\text{Perc}(\text{PledgeRatio})_{i,j} = f(\beta_1 \text{Technological}_i + \beta_2 \text{ThreeMentions}_j + \beta_3 \text{PreviousSuccess}_j + \beta_4 \text{Video}_i + \beta_5 \text{TotalWords}_i + \beta_6 \text{Website}_i + \beta_7 \text{USA}_i + \varepsilon_i)$$

6. Number of investors:

$$\text{Number}(\text{Investors}) = f(\beta_1 \text{Technological}_i + \beta_2 \text{ThreeMentions}_j + \beta_3 \text{Goal}_i + \beta_4 \text{PreviousSuccess}_j + \beta_5 \text{Video}_i + \beta_6 \text{TotalWords}_i + \beta_7 \text{Website}_i + \beta_8 \text{USA}_i + \varepsilon_i)$$

Whereas:

- Success = Dummy equal 1 if the project reached its goal
- PledgeRatio = Log of the division of the sum pledged by the goal of the project
- Investors = Log of the number of investors
- ThreeMentions = A binary variable that receives the value of 1 if the entrepreneur is mentioned at least 3 times in the 'About' section¹⁵. One or two mentions were not statistically significant in our analysis. As we add dummies for self-mentions that are higher than three, the results are significant. As it is reasonable that an entrepreneur might mention him or herself once or twice in the text without overshadowing the project, three times puts an unmistakable highlight on the creator of the project. In addition, our human rating experiment (Figure 4) clearly

¹⁴ Equation 4 is estimated using OLS, Logit and Probit; Equation 5 is estimated using OLS and Tobit; Equation 6 is estimated using OLS and Poisson.

¹⁵ Regression results were not significant when we used one or two mentions as an explanatory variable.

shows that the effect of one and two self-mentions is very similar, and a visible effect (although not linear) starts mainly from three mentions.

- Technology = Equals to 1 if the category of the project belongs to the Technological main-category, 0 if to the Artistic main-category.
- Goal = Log of the goal of the project in \$.
- PreviousSuccess = The number of earlier successes the entrepreneur had.
- Video = Equals to 1 if the entrepreneur put up a video on the project's page, 0 if not.
- TotalWords = Log of the total number of words in the 'About' section.
- Website = Equals to 1 if the user provides a website link, 0 otherwise.
- USA = Equals to 1 if the project is based in the USA, 0 otherwise.

[Insert Table 10 here]

We find a positive coefficient of the mention variable through the three different success measures. Even when controlling for all other variables, the results remain significant, proving the importance of the entrepreneur's self-description on the fundraising process.

Other variables are less unified between categories. Technology-based projects prove to have lower chances of meeting their goals, but higher chances of attracting more investors. We noted a higher percentage of funds to goal in the technological categories, while in the full regression the result suggests that the artistic projects raised more funds relative to their goals.

The goal variable followed previous analysis of having a negative relation of reaching the goal and a positive one with number of investors. The number of previous success' of the entrepreneur contributes to the number of investors and to the sum pledged relative to the goal, but not significant to the chances of success. Surprisingly, basing the project in the US only hurts its chances of reaching its funding goal, and naturally, featuring the video correlates in a significantly positive way for any measure of success.

In the three panels of table 12 we emphasize the difference between the main-categories, by running the regression for each of the three success measures separately on the artistic and the technological main-categories.

[Insert Table 11 here]

Clearly, the number of mentions has a significant affect only on the success of artistic projects. The artistic project's coefficient is significantly positive in all three measures, while the coefficient of the technological projects is never significant. This approves the likelihood of financing when more information is given about the human capital (self-mentioning), mostly in artistic projects. Moreover, the results are confirmed while running multinomial regressions, whereby the dependent success variable receives 0 for failure, 1 for success (reaching 100%-110% of the goal), and 2 for overachievement. Once again, we observed that the number of mentions was significant for the artistic categories, but not the technological ones. This finding might suggest that investors in technology related projects are less sensitive to the entrepreneur's background – our suggestion is that it might be easier to replace the entrepreneur in a promising technology based project, than in an artistic project due to the different nature of these projects.

Furthermore, we do not find that after controlling other relevant variables, serial entrepreneurs have a better probability to raise funds through this online platform.

[Insert Table 12 here]

6 Robustness Tests

Several robustness tests were conducted to verify our results.

6.1 Investors with a prior acquaintance of the entrepreneur

In order to eliminate all potential biases, we compared investors who we suspect to be family members and friends of the entrepreneur, to the rest of the investors. We did this in order to provide further verification of our findings. In the case of a family member, we assumed that the investors would be less sensitive to self-mentioning, this due to the fact they do not need any introduction to the entrepreneur. The results indeed show that groups, who are likely to be familiar with the entrepreneur, do not invest more in projects with more self- mentions.

Our approach to identify family and friends is as follows: First we identify the group that consists of investors with the same last name as the entrepreneur, and then we add the investors who were among the first 20 people to fund the project, and had not invested in any other project up to the day of our database extraction. Both of these groups are assumed to have some prior acquaintance with the entrepreneur, and therefore should not be affected by the way the project is presented.

The results are significant and interesting – investors who we suspect to be familiar with the entrepreneur are less sensitive to the data about her, while the rest of the investors need, on average, substantially more data about the entrepreneur. The mean number of mentions for the families' investment is 0.508, whereas the mean for individuals who do not share the same last name with the entrepreneur is significantly higher (0.709). We utilize the same logic in the second comparison, where the early investors fund projects with 0.782 mentions per project, which is less than the mean 0.892 for the rest. It is notable that the samples are not identical, which comes as a result of the investors and entrepreneurs maintaining standard person names (rather than names of groups, single names, etc.).

6.2 Serial investors

We employ another robustness test, comparing investments made by investors who have invested at least once in the past through Kickstarter (serial investors) - with all other investments done by investors who made only one investment through the platform. While analyzing all the investments in our sample and comparing single investments done by one time investors vs. Serial investors, we found out that serial investors invest in projects with significantly lower mentions than one time investors. This investment pattern is stable across categories and fundraising goals.

We also analyzed the mean share of serial investors in each project – while they represent on average 15.6% out of the investors across all projects, in artistic projects serial investors are only 14% out of all investors and in Technological projects they are responsible for 33.9% of the investors in such projects. More than that, we see a substantial decline in the mean share of serial investors as the number of mention increases.

We argue that both of these phenomenon can be attributed to a deeper decision making process by the experienced investors, which is less effected by the number of self-mentions of the entrepreneur.

6.3 Projects with the Highest and Lowest goals

Next, we wished to verify that the behaviors we identified were not heavily influenced by a large number of small projects, and the results we found about the effects of the presentation of the project hold true for the most prominent projects in our sample.

We therefore selected a sub-sample, consisting of the top decile of projects in terms of goals set. Hence, the sub-sample features the projects with the biggest goals and the biggest aspirations, which necessitate great effort and time from the entrepreneur, as well as deep attention to their presentation. Testing the same regressions as in chapters 4.2 and 5.2 on the sub-sample, all main coefficients remained in their positive/negative sign and their significance.

One may ask whether our findings relates to the higher self-mentioning of famous entrepreneurs. To cope with this potential bias we also employed the same analysis on

the bottom decile of projects (lowest goals), in order to eliminate possible biases by well-known entrepreneurs. We assumed that entrepreneurs with reputation, external to Kickstarter, would not initiate a project with a low goal. Therefore, a sub-sample with the lowest goals will enable us to examine a potential causality bias, where a successful fundraising will not be related to self-mentioning (but to external effects), and the self-mentioning is driven by such kind of reputation. Testing the same regressions as in chapters 4.2 and 5.2 on the sub-sample, all main coefficients remained in their positive/negative sign and their significance.

6.4 Social networks as proxy to external reputation

One may argue that self-mentioning is highly correlated with the entrepreneurs' reputation (outside of Kickstarter) so the number of self-mentions is actually driven by the popularity of famous entrepreneurs. Previously we discussed the counter point of view, where a very famous entrepreneur does not essentially need to elaborate and to mention herself a lot due to the fact she is well known.

In order to clarify these two arguments we hand collected social networks data about 500 entrepreneurs (they usually present their twitter and/or facebook profile at their 'about' page). We picked 500 business pitches that randomly represent all the self-mentions range. Due to the fact that well known entrepreneurs usually have a large amount of followers, we tried to find correlation between the scope of their social networks and their self-mention count on our dataset.

We did not find any correlation between social networks followers and self-mentions, either a positive correlation suggesting that indeed well-known entrepreneurs mention themselves more, or a negative correlation that suggests that it is enough for a very famous entrepreneur to present her picture, video or mention herself in the title only.

7 Conclusion

In this paper, we analyzed the different methods entrepreneurs call upon, when pitching their project concept to potential investors in a specific crowdfunding platform, Kickstarter. Using a text mining technique verified by human coding, we

analyzed a unique laboratory of 20,000 cross-vertical fundraising campaigns, which have collectively raised over \$120M. The Kickstarter reward based crowdfunding platform enables entrepreneurs to present their ideas to potential investors through text and video, trying to reach a certain funding goal.

With this in mind, when the entrepreneurs are pitching the idea to the potential investors, it is in their interest to call upon information that they believe is most apt to secure the interest of the investors, and compel them to contribute to the campaign. As such, we endeavor to gauge what is more successful for the entrepreneurs: placing more weight on their personage (the jockey) or their business idea (the horse). However, since our dataset of 20,000 campaigns is cross-vertical, in thirteen different categories, ranging from the technological to the artistic, it is clear that different categories/industries require different approaches to the pitch. Our findings indicate that technology projects tend to focus more on the horse (the business idea), whereas the artistic projects are focused on the personage of the entrepreneur (the jockey).

One of the key issues of this work is the ability to generalize its findings to other entrepreneurial finance mechanisms, due to the unique nature of reward based crowdfunding. First, it is important to note that our analysis and findings are relevant to this fast growing funding mechanism – Massolution predicts that the reward based Crowdfunding market will reach 1.35 billion dollars in 2013 (out of the total crowdfunding market which is forecasted to reach 2.7 billion dollars). Looking at the growth rate and success stories of the recent years, this funding mechanism is becoming an alternative to classic funding options. Furthermore, our methodology, and some of the results, is relevant to other crowdfunding mechanisms, which employ similar fundraising techniques and approach a large audience of potential small investors. Finally, deeper understanding of entrepreneurial pitches can benefit the entrepreneurial finance literature, by highlighting the decision making processes of entrepreneurs and investors, where a business pitch is a common fundraising manner.

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Table 1**Descriptive Statistics: Projects, Goals, and Sum Pledged, by Categories**

Descriptive statistics about sub categories and main-categories, regarding the number of projects, the average goal set per project, the sum of the goals set by all projects in the category, average amount of money pledged per project, and the sum of the total money pledged by category.

Category	Projects	Pct.	Goal per Project	Sum of Goal	Pct.	Pledged per Project	Total Pledged	Pct.
Art	1,728	8.4%	4,851.6	8,383,641	5.0%	3,751.8	6,483,062	5.2%
Comics	533	2.6%	4,304.7	2,294,406	1.4%	7,064.2	3,765,226	3.0%
Dance	490	2.4%	3,302.5	1,618,217	1.0%	3,109.3	1,523,576	1.2%
Fashion	381	1.8%	5,321.0	2,027,320	1.2%	4,433.7	1,689,226	1.3%
Film & Video	6,158	29.8%	10,767.0	66,303,420	39.9%	6,925.5	42,647,420	33.9%
Food	581	2.8%	10,338.4	6,006,623	3.6%	7,442.4	4,324,043	3.4%
Music	5,132	24.9%	4,291.9	22,026,216	13.3%	4,535.4	23,275,832	18.5%
Photography	760	3.7%	4,624.5	3,514,590	2.1%	3,986.1	3,029,404	2.4%
Publishing	1,626	7.9%	5,147.8	8,370,289	5.0%	4,073.2	6,623,020	5.3%
Theater	1,612	7.8%	3,937.8	6,347,704	3.8%	3,680.9	5,933,620	4.7%
<i>Total of artistic categories</i>	<i>19,001</i>	<i>92.0%</i>	<i>6,678.2</i>	<i>126,892,426</i>	<i>76.4%</i>	<i>5,225.7</i>	<i>99,294,429</i>	<i>79.0%</i>
Games	584	2.8%	43,910.2	25,643,556	15.4%	8,407.5	4,909,963	3.9%
<i>Total of gaming category</i>	<i>584</i>	<i>2.8%</i>	<i>43,910.2</i>	<i>25,643,556</i>	<i>15.4%</i>	<i>8,407.5</i>	<i>4,909,963</i>	<i>3.9%</i>
Design	739	3.6%	12,078.3	8,925,840	5.4%	20,738.9	15,326,014	12.2%
Technology	320	1.6%	14,419.7	4,614,315	2.8%	19,268.0	6,165,759	4.9%
<i>Total of technological categories</i>	<i>1,059</i>	<i>5.1%</i>	<i>12,785.8</i>	<i>13,540,155</i>	<i>8.2%</i>	<i>20,294.4</i>	<i>21,491,773</i>	<i>17.1%</i>

Table 2**The Three Mentioning Measures of the Business Pitch**

Table 2 reports basic descriptive statistics for the three mentioning measures in three different levels for each: The full sample, the successful projects sample, and the failed projects sample. For each one, the number of observations, mean number of mentions, standard deviation, median, and 90% of the sample are provided. We learn that in all three measures the average of mentions is higher for the successful projects than the failed ones.

	Obs.	Mean	Std Dev.	Median	90%
<i>All of the About Section</i>					
Number of mentions	20,644	0.714	1.407	0	2
Number of mentions for successful projects	16,530	0.767	1.443	0	2
Number of mentions for failed projects	4,114	0.501	1.228	0	1
<i>First 100 words of the About Section</i>					
Number of mentions	20,644	0.280	0.602	0	1
Number of mentions for successful projects	16,530	0.302	0.621	0	1
Number of mentions for failed projects	4,114	0.192	0.513	0	1
<i>Project Title</i>					
A Mention in the Title	20,644	0.174	0.379	0	1
A mention for successful projects	16,530	0.197	0.398	0	1
A Mention failed projects	4,114	0.083	0.276	0	0

Table 3**Mentioning Measures – Second Entrepreneur's Name**

Table 3 applies the structure of Table 2 for a sample of the mentioning measures of the second entrepreneur's name. The results follow patterns of Table 2 as well.

	Obs.	Mean	Std Dev.	Median	90%
<i>All of the About Section</i>					
Number of mentions	924	0.859	1.559	0	2
Number of mentions for successful projects	792	0.919	1.624	0	3
Number of mentions for failed projects	132	0.500	1.022	0	1
<i>First 100 words of the About Section</i>					
Number of mentions	924	0.320	0.711	0	1
Number of mentions for successful projects	792	0.336	0.734	0	1
Number of mentions for failed projects	132	0.227	0.547	0	1
<i>Project Title</i>					
A mention in the title	924	0.111	0.315	0	1
A mention for successful projects	792	0.120	0.325	0	1
A mention for failed projects	132	0.061	0.239	0	0

Table 4
Verifying Answers across Categories

Table 4 reports the results of t-tests made for the answers to the three questions of the survey. For every answer, we compared the answers received for projects in the 1st and 4th quarters of number of mentions. Significant results show that the difference in the number of mentions was reflected in the perception of the raters. This pattern is clear in both the Technology and the Dance categories.

<i>Technology</i>				<i>Dance</i>			
Q1 Answers				Q1 Answers			
Quartile	1 st	4 th	1 st -4 th	Quartile	1 st	4 th	1 st -4 th
Average Score	1.768	2.992	***	Average Score	2.408	4.720	***
Q2 Answers				Q2 Answers			
Quartile	1 st	4 th	1 st -4 th	Quartile	1 st	4 th	1 st -4 th
Average Score	2.064	3.248	***	Average Score	2.464	5.000	***
Q3 Answers				Q3 Answers			
Quartile	1 st	4 th	1 st -4 th	Quartile	1 st	4 th	1 st -4 th
Average Score	6.288	5.608	***	Average Score	5.344	4.496	***

Table 5**Number of Mentions by the Entrepreneur's Resume**

Table 5 reports the mean number of mentions, in each of the measures, for the number of previous projects by the same entrepreneur (Panel 5a), and number of previous successful projects by the same entrepreneur (Panel 5b).

Panel 5a. Number of Previous Projects of the Entrepreneur

Number of Previous Projects	About Section	First 100 Words	In Title	Freq.
0	0.527	0.209	0.094	1,048
1	0.638	0.242	0.088	1,021
2	0.704	0.254	0.085	189
3	0.785	0.241	0.101	79

Panel 5b. Number of Previous Successes of the Entrepreneur

Number of Previous Successes	About Section	First 100 Words	In Title	Freq.
0	0.526	0.207	0.089	1,611
1	0.736	0.268	0.096	624
2	0.667	0.242	0.061	99
3	0.825	0.225	0.075	40

Table 6
Measures of Mentions by Categories

Table 6 provides the mean number of mentions in the three measures of every category, and main-categories, in the sample. The table results show that entrepreneurs in different categories (representing different industries) choose to present themselves differently on average. It also shows the relative similarity between categories within the three main-categories.

Category	About Section	First 100 Words	In Title	Freq.
Art	0.608	0.244	0.092	1,728
Comics	0.642	0.268	0.092	533
Dance	1.235	0.512	0.194	490
Fashion	0.761	0.291	0.189	381
Film & Video	0.632	0.198	0.058	6,157
Food	0.711	0.277	0.120	582
Music	0.934	0.424	0.463	5,128
Photography	0.359	0.148	0.057	761
Publishing	0.478	0.189	0.079	1,625
Theater	0.872	0.380	0.112	1,610
<i>Total of artistic categories</i>	<i>0.728</i>	<i>0.290</i>	<i>0.186</i>	<i>18,995</i>
Games	0.617	0.150	0.027	585
<i>Total of gaming categories</i>	<i>0.617</i>	<i>0.150</i>	<i>0.027</i>	<i>585</i>
Design	0.507	0.177	0.041	739
Technology	0.503	0.159	0.059	320
<i>Total of technological categories</i>	<i>0.506</i>	<i>0.172</i>	<i>0.046</i>	<i>1,059</i>

Table 7

Multivariate Analysis – Drivers for Self-Mentioning

This table reports three regression methods – OLS, Poisson and Tobit. The dependent variable in all regression is the Number of Mentions. Results were consistent across all regressions and proved our first two hypotheses.

										<i>Poisson Regression</i>		<i>Tobit Regression</i>	
	<i>About Section</i>	<i>First 100 Words</i>	<i>Title</i>	<i>About Section</i>	<i>First 100 Words</i>	<i>Title</i>	<i>About Section</i>	<i>First 100 Words</i>	<i>Title</i>	<i>About Section</i>	<i>First 100 Words</i>	<i>About Section</i>	<i>First 100 Words</i>
Technological Main-Category	-0.303*** (0.043)	-0.115*** (0.019)	-0.782*** (0.068)	-0.302*** (0.044)	-0.114*** (0.019)	-0.783*** (0.068)	-0.305*** (0.044)	-0.115*** (0.019)	-0.776*** (0.068)	-0.488*** (0.044)	-0.512*** (0.076)	-1.234*** (0.115)	-0.748*** (0.093)
Log(Goal)	0.045*** (0.009)	0.006 (0.004)	0.034*** (0.009)	0.040*** (0.009)	0.002 (0.004)	0.030*** (0.009)	0.039*** (0.009)	0.001 (0.004)	0.027*** (0.009)	0.051*** (0.008)	0.018 (0.011)	0.109*** (0.021)	0.024 (0.016)
Previous Successes of Entrepreneur	0.147*** (0.018)	0.109*** (0.008)	0.0329* (0.018)							0.122*** (0.009)	0.156*** (0.011)	0.272*** (0.038)	0.210*** (0.028)
Success in Last Project Dummy				0.207*** (0.054)	0.093*** (0.024)	-0.178*** (0.064)							
Kickstarter Experience Dummy							0.076* (0.040)	0.026 (0.018)	-0.281*** (0.050)				
Video on The Project Page	0.109*** (0.026)	0.034*** (0.011)	0.193*** (0.029)	0.111*** (0.026)	0.034*** (0.011)	0.191*** (0.029)	0.110*** (0.026)	0.034*** (0.011)	0.184*** (0.030)	0.184*** (0.025)	0.113*** (0.037)	0.318*** (0.064)	0.153*** (0.049)
Log(Total Words in the About Section)	0.297*** (0.014)			0.298*** (0.014)			0.299*** (0.014)			0.473*** (0.014)		0.802*** (0.037)	
Available Links to Websites by the Entrepre	-0.097*** (0.020)	-0.040*** (0.009)	-0.160*** (0.0216)	-0.089*** (0.020)	-0.030*** (0.009)	-0.145*** (0.022)	-0.085*** (0.020)	-0.028*** (0.009)	-0.130*** (0.022)	-0.132*** (0.017)	-0.125*** (0.027)	-0.257*** (0.047)	-0.162*** (0.037)
US Based Project	0.138*** (0.042)	0.090*** (0.018)	0.530*** (0.056)	0.139*** (0.042)	0.089*** (0.019)	0.529*** (0.056)	0.138*** (0.042)	0.089*** (0.019)	0.530*** (0.056)	0.204*** (0.038)	0.366*** (0.068)	0.499*** (0.103)	0.457*** (0.084)
Constant	-1.521*** (0.101)	0.142*** (0.034)	-1.761*** (0.093)	-0.495*** (0.102)	1.174*** (0.034)	-1.730*** (0.093)	-0.490*** (0.102)	1.178*** (0.034)	-1.697*** (0.093)	-3.804*** (0.096)	-1.785*** (0.113)	-6.966*** (0.259)	-2.030*** (0.152)
R ² / Pseudo R ²	0.034	0.013	0.0204	0.032	0.005	0.0206	0.031	0.004	0.022	0.036	0.009	0.0057	0.0164
Observations	20,057	20,059	20,059	20,057	20,059	20,059	20,057	20,059	20,059	20,057	20,059	20,057	20,059

Table 8
Measures of Success by Category

This table reports the means of goals, success and outcome of the projects, across the platforms' categories, and the three main-categories.

Category	Mean of % of success	Mean of Goal	Mean of % Pledged	Mean of Investors	Freq.
Art	0.823	4,851.6	1.602	58.8	1,728
Comics	0.799	4,304.7	3.524	128.7	533
Dance	0.882	3,302.5	1.289	45.2	490
Fashion	0.696	5,321.0	2.525	56.8	381
Film & Video	0.770	10,767.0	4.067	77.8	6,158
Food	0.773	10,338.4	1.050	92.7	581
Music	0.883	4,291.9	1.821	67.4	5,132
Photography	0.778	4,624.5	1.100	54.6	760
Publishing	0.719	5,147.8	2.096	68.7	1,626
Theater	0.898	3,937.8	1.817	50.4	1,612
<i>Total of artistic categories</i>	<i>0.814</i>	<i>6,678.2</i>	<i>2.548</i>	<i>69.9</i>	<i>19,001</i>
Games	0.658	43,910.2	1.769	182.5	584
<i>Total of gaming category</i>	<i>0.658</i>	<i>43,910.2</i>	<i>1.769</i>	<i>182.5</i>	<i>584</i>
Design	0.652	12,078.3	6.136	287.7	739
Technology	0.603	14,419.7	1.648	213.6	320
<i>Total of technological categories</i>	<i>0.637</i>	<i>12,785.8</i>	<i>4.780</i>	<i>265.3</i>	<i>1,059</i>

Table 9**Measures of Success by Entrepreneur's Prior Projects**

These two tables present the three measures of success by the number of previous projects of the entrepreneur. Panel 10a presents the three success measures according to total number of the entrepreneurs' previous projects (successes and failures), and Panel 10b presents the success measures by the number of prior successful projects only.

Panel 10a. Number of Previous Projects of the Entrepreneur

Number of previous projects	Chances of Success	Mean of % Pledged	Mean of Investors	Freq.
0	0.512	1.021	73.5	1,048
1	0.641	4.171	88.7	1,021
2	0.619	2.385	65.1	189
3	0.633	1.549	71.9	79

Panel 10b. Number of Previous Successes of the Entrepreneur

Number of previous successes	Chances of Success	Mean of % Pledged	Mean of Investors	Freq.
0	0.506	1.911	62.6	1,611
1	0.718	3.889	115.5	624
2	0.758	3.789	102.2	99
3	0.800	2.114	79.0	40

Table 10**Effects of the Project Presentation Variables on Fundraising Success**

This table presents the OLS Regression Results for Effects of Antecedents on Funding Measures. The dependent variable is reaching the funding goal, and the independent variables are the entrepreneurial presentation measures, (self-mentions, video and links) and project attributes (goal, main category and location).

	<i>Reaching The Goal</i>	<i>% Pledged</i>	<i># of Investors</i>
Technological Main-Category	-0.350*** (0.0435)	-0.120*** (0.0406)	0.230*** (0.034)
More than Two Mentions	0.388*** (0.0494)	0.166*** (0.0359)	0.205*** (0.030)
Log(Goal)	-0.280*** (0.0100)		0.367*** (0.007)
Previous Successes of Entrepreneur	0.00272 (0.0216)	0.128*** (0.0167)	0.052*** (0.014)
Video on The Project Page	0.539*** (0.0285)	0.185*** (0.0242)	0.389*** (0.021)
Log(Total Words in the About Section)	0.141*** (0.0157)	0.0356*** (0.0132)	0.163*** (0.011)
Available Links to Websites by the Entrepreneur	-0.768*** (0.0228)	-0.539*** (0.0185)	-0.202*** (0.016)
US Based Project	-0.129*** (0.0488)	-0.0474 (0.0393)	-0.032 (0.033)
Constant	2.460*** (0.115)	-0.337*** (0.0866)	-0.454*** (0.080)
R ² / Pseudo R ²	0.1344	0.047	0.219
Observations	20,057	19,635	19,635

Table 11
Predictions of Project Success by Main-Categories

This table presents three OLS Regressions Results – dependent variables are the three success measures while we compare the two main categories (artistic and technological) by different pitch attributes.

	<i>Dependent variable: Success in Reaching the Goal</i>		<i>Dependent variable: Log of Sum Pledged</i>		<i>Dependent variable: Log of % Pledged</i>	
	Artistic	Technological	Artistic	Technological	Artistic	Technological
More than Two Mentions	0.407*** (0.0516)	0.151 (0.180)	0.204*** (0.0335)	0.305 (0.235)	0.165*** (0.0355)	0.190 (0.251)
Log(Goal)	-0.277*** (0.0105)	-0.325*** (0.0355)	0.635*** (0.00767)	0.496*** (0.0415)		
Previous Successes of Entrepreneur	0.0003 (0.0224)	0.0317 (0.0832)	0.0520*** (0.0158)	0.0363 (0.0990)	0.129*** (0.0166)	0.127 (0.105)
Video on The Project Page	0.532*** (0.0293)	0.647*** (0.125)	0.408*** (0.0232)	0.911*** (0.163)	0.171*** (0.0240)	0.470*** (0.169)
Log(Total Words in the About Section)	0.139*** (0.0163)	0.152** (0.0595)	0.182*** (0.0127)	0.227*** (0.0822)	0.0349*** (0.0131)	0.0269 (0.0860)
Available Links to Websites by the Entrepreneur	-0.779*** (0.0235)	-0.601*** (0.0940)	-0.409*** (0.0175)	-0.293** (0.118)	-0.537*** (0.0183)	-0.604*** (0.124)
US Based Project	-0.0909* (0.0504)	-0.603*** (0.188)	-0.0848** (0.0370)	-0.636*** (0.219)	-0.0132 (0.0391)	-0.558** (0.234)
Constant	2.417*** (0.120)	2.694*** (0.442)	1.540*** (0.0904)	2.502*** (0.568)	-0.354*** (0.0860)	-0.128 (0.561)
Pseudo R ²	0.128	0.1232	0.354	0.231	0.354	0.231
Observations	18,998	1,059	18,593	1,042	18,593	1,042

Table 12**Multinomial Regression of Success Vs. Pitch Attributes**

This table presents the estimated coefficients of multinomial regression of antecedents on funding outcomes.

	Artistic	Technological
<i>(0 = Fail is the base outcome)</i>		
<i>1=Successful Pledge up to 110% of the Goal</i>	(1)	(2)
More than Two Mentions	0.689*** (0.103)	0.028 (0.415)
Goal	-0.000*** (0.000)	-0.000*** (0.000)
Previous Successes of Entrepreneur	0.035 (0.047)	-0.591 (0.493)
Video on The Project Page	0.814*** (0.054)	0.382 (0.250)
Total Words in the About Section	0.000 (0.000)	0.000 (0.000)
Available Links to Websites by the Entrepreneur	-1.512*** (0.046)	-1.161*** (0.205)
US Based Project	-0.154 (0.097)	-0.764* (0.419)
Constant	1.285*** (0.111)	0.709 (0.481)
<i>2=Success over 110%</i>	(3)	(4)
More than Two Mentions	0.804*** (0.103)	0.123 (0.311)
Goal	-0.000*** (0.000)	-0.000*** (0.000)
Previous Successes of Entrepreneur	0.103** (0.044)	0.188 (0.158)
Video on The Project Page	0.771*** (0.054)	0.850*** (0.207)
Total Words in the About Section	0.001*** (0.000)	0.001** (0.000)
Available Links to Websites by the Entrepreneur	-1.342*** (0.047)	-1.054*** (0.165)
US Based Project	-0.163* (0.098)	-0.948*** (0.329)
Constant	1.282*** (0.112)	1.255*** (0.384)
Pseudo R ²	0.063	0.070
Observations	19,001	1,059

Table 13
Effects of Antecedents on Success Measures

This table presents the OLS regression results for the three success measures according to the Pitch attributes.

	<i>Reaching The Goal</i>	<i>% Pledged</i>	<i># of Investors</i>
More than Two Mentions	0.821* (0.444)	0.668 (0.416)	0.752** (0.358)
Log(Goal)	-0.653** (0.315)		-0.346 (0.327)
Log(Total Words in the About Section)	0.195* (0.117)	0.455*** (0.142)	0.285** (0.124)
Constant	5.804* (3.433)	-3.690*** (0.887)	6.432* (3.573)
R ² / Pseudo R ²	0.0495	0.072	0.067
Observations	208	202	202

Figure 1

Kickstarter Growth Over Time

This graph shows the growing amount of projects and investments in Kickstarter over the first three years of its operation. The left Y axis is a total of cumulative investments that were done through Kickstarter (only investments in projects that reached their funding goals). The right Y axis is the total number of projects that raised funds through the platform. The X axis represents the time in months since the inception of the platform. We are able to see a clear raising trend of total investments, goals, and amount of projects.

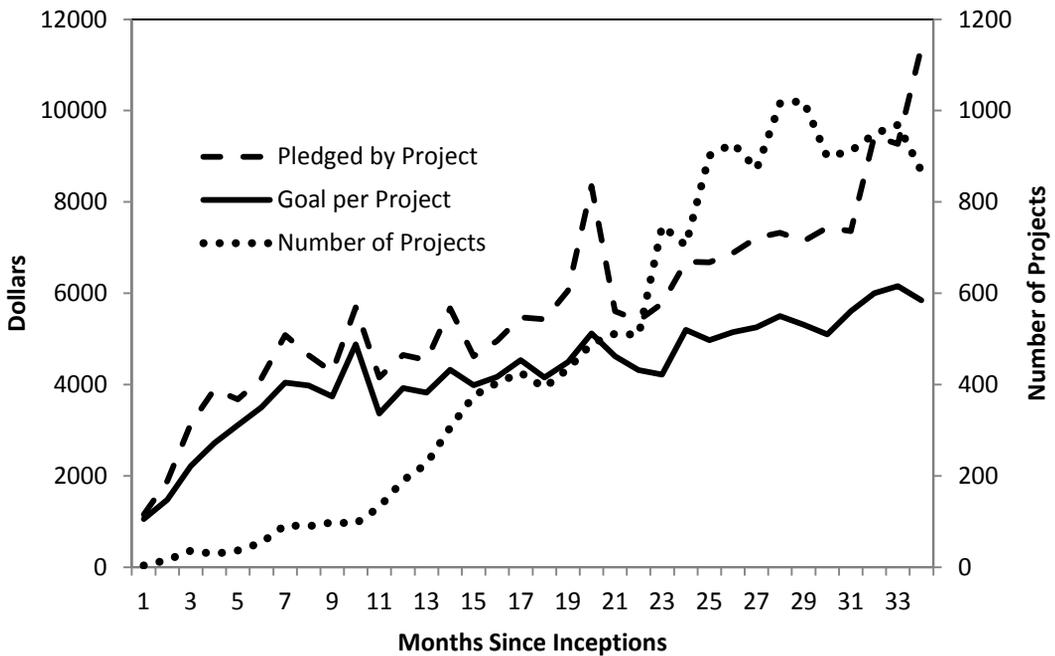


Figure 2

New Investors Gaining by Week

This figure presents the average of new weekly investors in successful and failed projects. The Y axis is the weekly average of new investors that invested in successful and failed projects through Kickstarter. Successful projects are those that reached their funding goals. We can see that a successful project succeeds in attracting 3 times more new investors than a failed one, while both decrease toward the end of the time limited fundraising campaign, although successful projects have two peaks of new investors toward the end.

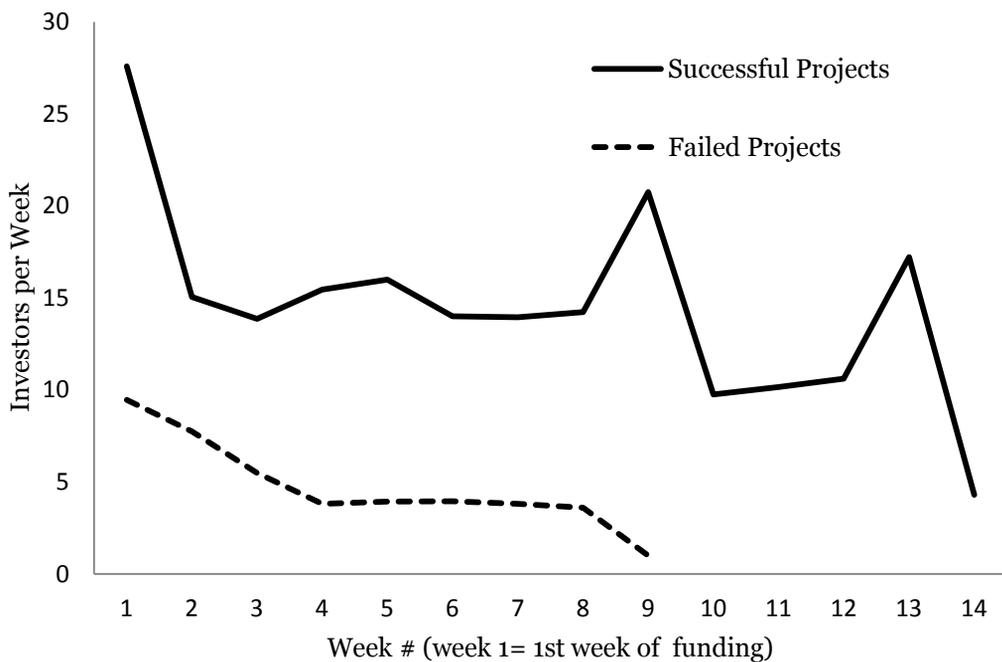


Figure 3a

Example of an 'About' Page with Multi Self-Mentions

This project page screenshot illustrates a pitch that emphasizes the entrepreneur.

The screenshot shows a Kickstarter project page. At the top, the navigation bar includes 'KICKSTARTER', 'Discover great projects', 'Start your project', a search bar, and links for 'BLOG', 'HELP', and a user profile 'Me'. The main heading is 'Daniel Johnston's "Infinite Comic Book of Musical Greatness"', with a subtext 'A Comics project in Waller, TX by Daniel Johnston · send message'. Below the heading are buttons for 'PROJECT HOME', 'UPDATES 12', 'BACKERS 433', and 'COMMENTS 30'. A video player shows a man in a cap with a 'PLAY' button. To the right, a summary box displays '433 BACKERS', '\$26,364 PLEDGED OF \$10,000 GOAL', and '0 SECONDS TO GO'. A green banner states 'FUNDING SUCCESSFUL' with a checkmark and the text 'This project successfully raised its funding goal on March 6, 2011.' Below this are three pledge tiers: 'PLEDGE \$10 OR MORE' (38 BACKERS), 'PLEDGE \$25 OR MORE' (200 BACKERS * Limited Reward (47 of 250 remaining)), and 'PLEDGE \$50 OR MORE' (164 BACKERS * Limited Reward (46 of 200 remaining)). The 'ABOUT THIS PROJECT' section contains two paragraphs of text.

ABOUT THIS PROJECT

We're bringing the long awaited first full-length comic book by legendary musician and artist Daniel Johnston to his loyal fans. Donations will fund the creation, production, and manufacture of "Daniel Johnston's Infinite Comic Book of Musical Greatness."

The project will be much more than just a standard comic book...although a standard comic book by Daniel Johnston would be anything but standard and certainly worth funding. The "Infinite Comic Book of Musical Greatness" will combine the unique and brilliant characters, images and words of Daniel Johnston along with Daniel's amazing music, and the musical and artistic contributions of fans, to create a one-of-a-kind interactive comic book

Figure 3b

Example of an 'About' Page Without Self-Mentions

This project page screenshot illustrates a pitch that doesn't mention the entrepreneur.

The screenshot shows a Kickstarter project page for "Zombies Vs. (A Graphic Novel)". The page header includes the Kickstarter logo, navigation links for "Discover great projects" and "Start your project", a search bar, and links for "BLOG", "HELP", and "Me". The project title is "Zombies Vs. (A Graphic Novel)" and it is described as "A Comics project in Jacksonville, NC by Richard Ankrney". Below the title are tabs for "PROJECT HOME", "UPDATES 10", "BACKERS 74", and "COMMENTS 18".

The main content area features a large, stylized graphic of the word "ZOMBIES" in green with a red outline, and "VS" in red below it. To the right of the graphic is a funding summary box showing "74 BACKERS", "\$4,077 PLEDGED OF \$1,500 GOAL", and "0 SECONDS TO GO". A green banner below this box states "FUNDING SUCCESSFUL" and "This project successfully raised its funding goal on February 8." with a checkmark icon.

Below the funding summary are two pledge options: "PLEDGE \$1 OR MORE" with "0 BACKERS" and "This is the I love the Idea Pledge, by pledging here you will be given a world wide thank you posted on the Zombies Vs. fan page." and "Estimated Delivery: Jul 2012"; and "PLEDGE \$2 OR MORE" with "14 BACKERS" and "Do me Digital pledge!! This is the pledge for all you tech savvy types..For just a 2.00 nod!! You will get the shout out and when the comic releases you will get a digital copy direct to you!! some people say this is the way of the future I say..Why not!! so please send a nod..." and "Estimated Delivery: Jul 2012".

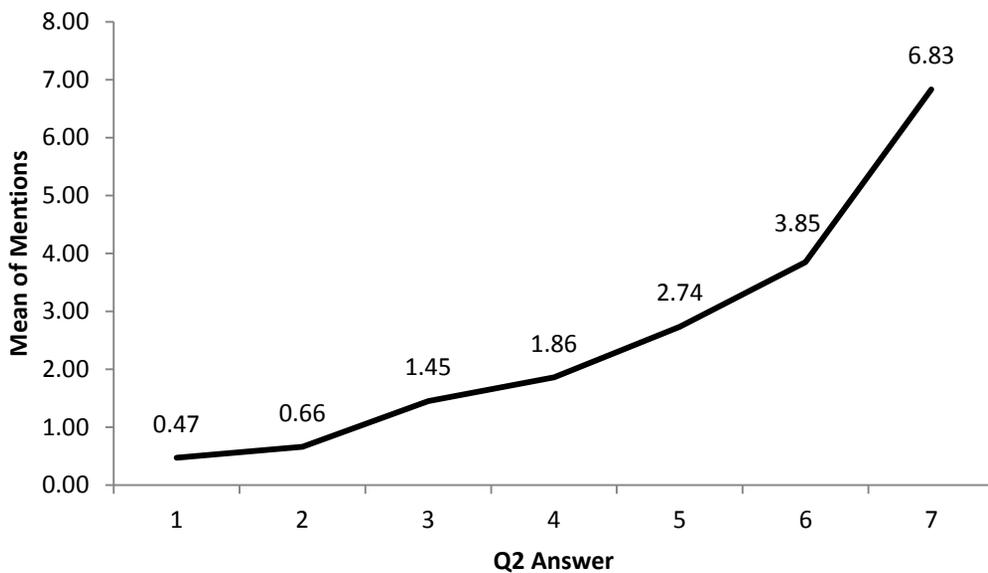
At the bottom left, there are social media sharing options: "Like" (510 people like this), "Tweet", "EMBED", and a URL "http://kck.st/wOst1A". Below this is the "ABOUT THIS PROJECT" section, which contains the following text:

"Zombies Vs." is a graphic novel that will in the first (hopefully of many more to come) book tell four stories depicting Zombies fighting others in a multitude of genre, within its pages you will get a good tale. Maybe even a modern history lesson! But, you will absolutely be entertained! So please help us make this awesome Graphic Novel become a reality by showing some love, even if its just one dollar. We thank you for reading this and know that a video is on its way!!

This First book will contain four distinct stories. The first story in the book as depicted will be "Zombies Vs. Naval Special Warfare" only because I cant use "Seal Team 6" but you get the idea!!! This is my telling of... well lets just say a mission that just might make you go..HMMM? if I disclose to much it could take away the surprise!!

Figure 4**Human Rating vs. Self-Mention Counts**

This graph illustrates the human verification of our text analysis – human rating of the relative emphasize on the entrepreneur (X axis) vs. counted number of mentions from the text mining technique (Y axis). The number reported on the graph is the mean Q2 answer. We can see a clear correlation between both methods, verifying the text mining technique with a random sample of projects and a large amount of heterogeneous groups of raters.



8 Appendixes

8.1 Variables list table

This table lists the projects' variables used for analyzing the data set. Some of the variables were extracted directly from the data (Goal, Pledged, Investors, Category, Country), while getting others involved some manipulation.

Variable	Definition
Goal	The amount entrepreneurs seek to raise.
Pledged	The sum raised by the projects.
Investors	Number of site users to fund the project.
Category	Industry of the projects
Country	Country of the project
Success (dummy)	Dummy equal 1 if the project reached its goal
Fail (dummy)	Dummy equal 1 if the project failed to reach its goal
Experience (dummy)	Dummy equal 1 if the entrepreneur had any prior projects in the site
No. of Previous Projects	The number of previous projects initiated by the entrepreneur
Prev_Success (dummy)	Dummy equal 1 if the entrepreneur's project had reached its goal
No. of Successful Projects	The number of successful projects initiated by the entrepreneur
Video (dummy)	Dummy equal 1 if a video is presented on the page
Words	Number of words used in About section
Patent (dummy)	A mention of a patent in the description of the project
Website (dummy)	Dummy equal 1 if the entrepreneur provided a link to a website

8.2 Human coding survey questioner

Date: _____ Hold an MBA / MBA Student / Other: _____

Project Number: Category First name of the entrepreneur:
 _____ (T/D): _____

1. Please rate on a scale of 1 to 7 which of the following was emphasized more in the project page – the project or the creator of the project.

1	2	3	4	5	6	7
Very emphasized on the project			Equal			Very emphasized on the creator

2. Please rate the degree of emphasis on the creator in the project page.

1	2	3	4	5	6	7
Not emphasized at all						Very emphasized

3. Please rate the degree of emphasis on the project in the project page.

1	2	3	4	5	6	7
Not emphasized at all						Very emphasized