# INNOVATION THROUGH CROWDFUNDING: A QUANTITATIVE AND QUALITATIVE ANALYSIS OF KICKSTARTER

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#### ABSTRACT

This paper explores the crowdfunding contribution as an alternative to traditional forms of financing. A recent approach for this concept is emerging with the assistance of internet platforms and social networks. We explore evidence on all projects that successfully raised its funding goal on the world's largest website to date, Kickstarter, until February 29, 2012. This information is submitted to a mixed quantitative and qualitative methodology. First we use ordinary least squares and the stepwise approach to determine all variables that make a significant contribution to the prediction of the financing rate. Then, we select some cases and ask people which professional activity is related to crowdfunding to fill out a survey and help us in the identification of other variables affecting the success of financing, which cannot be tested within an econometric framework.

*Keywords: crowdfunding, innovation, entrepreneurship, kickstarter* 

#### THE NATURE OF CROWDFUNDING

Crowdfunding is a tool that is emerging as an alternative to traditional forms of financing such as bank loans, business angels, bootstrapping or venture capital investment, helping entrepreneurs to raise funds to launch their ideas. It occurs when a large group of people, seen as the crowd, agrees to collaborate with small amounts of money to a project, in exchange for a reward. Though this idea is gaining a lot of relevance nowadays it is not, nevertheless, new. Its roots are ancient and intimately related with philanthropy actions. Examples of the basis of crowdfunding can be, for instance, in form of lottery tickets or charity contributions. However, a recent internetbased and ex-ante approach, in the form of open call, provides new applications for this concept. Ex-ante is a game changer vision once it happens when financial support is given on the front end to assist in achieving a mutually desired result (Kappel, 2009), which means that no investment is realized until the financial goals are achieved. The fact that the project only is implemented after this preposition allows the test of creative and innovative ideas that would seem risky to invest without further warranties. The core goal of this study is to understand how initiatives succeed in these online platforms. To do so, we try to identify the most relevant variables and factors that influence an effective fundraising campaign.

Crowdfunding is a subset of crowdsourcing, which represents the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined - and generally large - network of people in the form of an open call (Howe, 2006). Crowdsourcing is seen as production model that utilizes intelligence and voluntary crowd wisdom to solve problems, create contents or provide solutions to companies in exchange for money, prizes, recognition or even for intellectual satisfaction (Howe, 2008). As Kleeman & Gunther (2008) state, it takes place when a profit oriented firm outsources specific tasks essential for the making or sale of its product to the general public, the crowd. In their first years of life, crowdsourcing practices are being implemented in several enterprises, and crowdfunding platforms are collecting funding at an exponential rhythm. In the USA, it took less than five years to hit the 1 billion dollar mark (Koren, 2011), and in April 2012 there were 452 crowdfunding platforms active worldwide, according to Massolution (2012).

There is still a lack of a unifying holistic framework for enhancing our understanding of this recent trend, and for providing managerial guidance and directions for further research related to this phenomenon (Ordanini, et al, 2009). Some aspects of crowdfunding are, however, related to several streams of innovation literature, which provide us with some interesting insights. In the same extent of *crowdsourcing*, open innovation and lead user theories apply also in crowdfunding models and are also covered by some authors such as Ordanini et al (2009) or Belleflamme, Lambert & Schwienbacher (2011). Hereafter, an innovation framework of this phenomenon is introduced. Schumpeter (1950) pioneered the concept of innovation and described it as a historic and irreversible change in the way of doing things (Arena & Dangel-Hagnauer, 2002). Innovation takes place via a process whereby new thought, behavior, or thing, which is qualitatively different from existing forms, is conceived of and brought into reality (Robertson, 1967). To this effect, we see the innovation as the act of making things differently, with the intent to create value for the generation of competitive advantages. It is usually reflected in the development of more effective products, services or processes. The innovation process has been identified for radical, incremental, really new, discontinuous, and imitative innovations (Garcia & Cantalone, 2002). We are able to classify *crowdfunding* as a vertical process innovation, which consists of the introduction of a better quality version of the existing products and/or of their production processes, as new process that renders completely obsolete a much smaller subset of the set of the pre-existing processes (Cozzi & Spinesi, 2006). According to the same authors, the primary focus of process innovations is the efficiency improvement of the production process to improve the output productivity. This new idea of collaborative financing turns to be a clear example of a process innovation, which is sustained in a profound redesign of the business configuration. It is changing completely the financing and risk structure of the financing industry, with given proofs in the creative industries. Besides, *crowdfunding* is not only an innovation by itself, it is also a source of innovation and creativity for several levels as products, services, business models, and an incentive for process improvements in established firms, as it provides a paradigm shift in the state of science or technology embedded in a product, new R&D resources, and/or new production processes for a firm and new marketplaces for innovations to evolve (Garcia & Cantalone, 2002). We do not see it, though, as a radical innovation. The shift from traditional financing systems has a clear incremental nature, mainly observed at the local of actuation, which is the internet; and at the contributor, that changes from individual to a group. However, it is in the center of some radical or disruptive discontinuities on both a macro and micro-level, following the Schumpeterian creative destruction notion. In Rosenberg's perspective, there are two ways of increasing the output of the economy: the first is that you can increase the number of inputs that go into the productive process, while the second states that if you are clever, you can think of new ways in which you can get more output from the same number of inputs (Rosenberg, 2004), and learn how to use inputs more productively (Rosenberg, 1973). *Crowdfunding* represents the second idea, as a system that reorganizes the inputs given into a new process structure, promoting efficiency, competitiveness and transparency of the economies. Evidence shows that *crowdfunding* is best suited to launch small and medium ventures (Belleflamme, Lambert, & Schwienbacher, 2011), and according to Ley & Weaven (2011), the growth of economies around the world has shown to largely depend upon the contribution of small firms to employment and national Gross Domestic Product. The same idea is presented in Cumming (2007) or Gans, Hsu & Stern (2002).

Crowdfunding also affects the dynamics on diffusion processes. Rogers (1962) popularizes the theory that seeks to explain how, why, and at what rate innovations spread through cultures, and defines diffusion as the process by which it is communicated through certain channels over time among the members of a social system. Crowdfunding, as a structure for innovation, implies a higher rate of adoption, which is defined as the relative speed with which members of a social system adopt an innovation, and is measured by the length of time required for a certain percentage of the members of a social system to adopt an innovation (Rogers, 1962). If crowdfunding is a model that provides connection between final consumers and entrepreneurs, then its campaigns are able to reach a larger group of pioneer people at its beginning, which is to say that innovative projects will spread faster since pioneer behavior is crucial because it can influence the behavior of the of future clients.

Crowdfunding as innovation is still in the growth life cycle of innovation, as its penetration is still relatively low. We observe a quick introduction of new platforms and a high imbalance between demand and supply. Our predictions are that this phase is going to roll until the end of the year 2013. In addition, *crowdfunding* works as a tool that provides encounter between technology-push and demand-pull as it not only implies that a new invention is pushed through R&D, production and sales functions onto the market (Martin, 1994) with the difference that the satisfaction of user needs is decided by themselves, but also encourages innovations based upon market pull has been developed by the R&D function in response to an identified market need (Martin, 1994).

In the perspective of innovation as a non-linear system, we make a comparison between *crowdfunding* and rhizome, an underground plant stem capable of producing the shoot and root systems of a new plant. This capability allows the parent plant to propagate and also to perennate underground. Furthermore, this concept is brought to philosophy by Deleuze and Guattari (1972, 1980), in a futuristic perspective that is now gaining relevance in network organizational theories. The rhizome connects any point to any other point, and it is an acentered, non-hierarchical, non-signifying system without a general (Deleuze & Guattari, 1972, 1980). The internet is widely acknowledged for being a rhizomatic structure (Hamman, 1996). Like the internet though which it operates, *crowdsourcing* [and therefore *crowdfunding*] recognizes no boundaries. The network does not care if you are down the block, downstate, or down under – if you can perform the service, design the product or solve the problem, you have got the job (Howe, 2008). Drucker (1968), Bell (1973), Toffler (1990), among others, observe that the society we live in has been gradually turning into a knowledge society. Howe (2008) describes the internet as the greatest mechanism for distributing knowledge the world

has ever seen, as it enabled mass participation, and possibility of organize, reach and coordinate people. And it does it very quickly. In *crowdfunding*, it connects people with money to the people who need it. This author underlines that crowdsourcing is not about technology, is about networking, and networking is rhizome. Online communities are at the heart of *crowdsourcing*, providing a context and a structure within which the "work" takes place (Howe, 2008). Given this, we are able to state that rhizomatic structures are all the base of *crowdfunding* practices. For instance, the platform in which it operates is based on the internet and enables anyone in the world to be part of the process. It is just one click away from everyone with a device with internet connectivity. Furthermore, it is impossible to predict what results may be produced within this interactions. Another significant rhizomatic structure in this process are to be found in the social networks (Facebook, Twitter and others), since entrepreneurs are able to advertize their projects through all their friends and acquaints just by sharing a link. It also potentiates backers to do the publicity by themselves, as keen fans of the campaign. The premises in *crowdfunding* and rhizome are clear the same: supporting new connections. While a rhizome provides insight about how connections are made, crowdfunding uses this rhizomatic structures for connecting people in modern fundraising methods. Crowdfunding allows multiple combinations between elements, which are dynamic and complex, and sometimes unlikely, unexpected and unpredictable. Besides, each agent uses it according to their interest.

This perspective takes us to the level to understand more about the power of the crowds. What are the differences between one large individual contribution and the sum of small contributions within a large group of people? Almost every individual has some advantage over all others because he possesses unique information of which beneficial use might be made (Hayek, 1945). According to Levy (1997), no one knows everything but everyone knows something, and all knowledge resides in humanity, digitization and communication technologies must become central in this coordination. Surowiecki (2004) adds that, under the right circumstances, groups are remarkably intelligent, and are often smarter than the smartest people in them. But, how exactly can so many dispersed individuals excel at singular, sometimes highly complex problems when traditional problem-solving teams cannot? (Brabham, 2008). Given the right set of conditions, the crowd will almost always outperform any number of employees – a fact that companies are becoming aware of and are increasingly attempting to exploit (Howe, 2008). According to many scholars who study identity, diversity is important because each person's unique identity shapes their worldview. Thus, we can assume that differing worldviews might produce differing solutions to a problem, some of which might be superior solutions because the ideas might consider the unique needs of diverse constituencies (Brabham, 2008). Yet, if diversity of opinion, independence, decentralization and aggregation of crowd are necessary conditions for crowd wisdom – as opposed to crowd stupidity and irrational mobs (Surowiecki, 2004), how can we not ground production in the web? (Brabham, 2008). The crowd is constituted by people, and what counts are their skills, knowledge and experience (Chandler, 1977). Therefore, crowdsourcing is a model capable of aggregating talent, leveraging ingenuity while reducing the costs and time formerly needed to solve problems (Brabham, 2008). This is also applicable to *crowdfunding*, since it is the valuable tool that allows good ideas which do not fit the pattern required by conventional financers to break through and attract cash through the wisdom of the crowd (Roebuck, 2011). Ultimately, the crowd funds what the crowd wants (Ley & Weaven, 2011).

### **METHODOLOGY**

We combine quantitative and qualitative analysis according to Yin (1989, 1993) and Eisenhardt (1989, 1991). First, we perform a quantitative analysis, using econometric models. Then, we choose multi-cases for a qualitative study, because they extend emergent theory or because they fill theoretical categories. We select Kickstarter as our base for analysis since it is the largest crowdfunding platform existing to date, representing at its best the power and the history of internet-based crowdfunding. Kickstarter is a generalist, for-profit and reward-based platform, and is directed to forprofit initiatives that belong to the creative industries. The entrepreneur is required to make a video and a description of the campaign and to define a set of counterparts for different price range of contributions. It is also defined a financial goal for funding. Then, the project stands in the front of the world for a pre-determined period of time, which usually goes from one to two months. In the meanwhile, people can visit the campaigns page and users opt to make their contribution or not. At the end of that timeline, project may or may not reach their objective. In the case that success is achieved, money is transferred from funders to creators. In general there are no limits for amounts collected, and it often happens for the projects to raise more money than what was asked.

Regarding quantitative analysis, our sample is formed by projects financed in Kickstarter since May 3, 2009 until February 29, 2012, corresponding to 18.430 different observations. All successful projects can be found listed in the website. The database was collected through scraping from the website with individual verification, at 1 March 2012. For each of those 18.430 projects we captured the following information: (1) number of the project (2) name of the project (3) date of funding (4) short description of campaign (5) pre-determined goal in dollars (6) capital pledged in dollars (7) financing rate (8) number of backers (9) average contribution in dollars (10) category of the project (11) sub-category of the project (12) number of comments from backers (13) number of updates from the entrepreneur (14) number of levels of reward (15) city (16) state (17) country (18) name of the entrepreneur (19) number of other projects backed by the entrepreneur (20) URL to the project.

Our quantitative analysis starts with a closer examination of our data. First, we observe that some projects exhibit very small amounts of capital (less than 500 dollars) both asked and pledged. On the other hand, we find observations with missing values for some variables, namely fields (16), (17) and (18). After removal of all of these cases, we end up with 17.457 projects remaining for analysis. Then, we perform some stability tests to our data. In fact, we observe that the number of projects launched on Kickstarter grew exponentially between May 2009 and February 2011, remaining stable until February 2012<sup>2</sup>. This means that this online platform reached maturity in this period, representing a subsample of 12.203 observations. For our analysis, we consider only projects successfully financed from March 1, 2011 and February 29, 2012. We decide to use (7) as proxy for success as it seems to be the more appropriated dependent variable, considering success as the situation where overcoming initial expectations is achieved.

<sup>&</sup>lt;sup>1</sup> Financing rate as the ratio between capital pledged in dollars and the pre-determined goal in dollars. Since our sample is only constituted by financed projects, the financing rate is always equal or higher than 1.

<sup>&</sup>lt;sup>2</sup> Numbers for 2011 are impressive: 11836 projects financed, representing a total of almost 100 million dollars pledged (<a href="http://www.kickstarter.com/blog/2011-the-stats">http://www.kickstarter.com/blog/2011-the-stats</a>).

The fact that information retrieved in a static format is acquainted for a more efficient inspection of the data. If we consider time variable, we find that fields (12) and (13), as they are dynamic, have the possibility to increase after 1 March 2012. Projects are financed at different dates, and after of its completion there is still the possibility for the entrepreneurs to update their status, and for funders to comment it. The consistent growth of the crowd is also considered, in the way that there is significantly more people using this platform than in its beginning.

We use ordinary least squares (OLS) to estimate the "best fit" of a set of independent variables such as (8) (12) (13) (14) and (19), and dummies accounting for (10) against the dependent variable we wish to explain or predict: (7). The primary product of regression analysis is a linear equation which can be used to predict values of the dependent variable, given the values of the independent variables. This method is based upon a number of statistical assumptions such as: parameters are linear; residuals are homoscedastic, uncorrelated with independent variables and with one another over time; data is derived from a normally distributed population.

Regarding the qualitative analysis, we use the Kickstarter's campaign page and perform a survey with the intention of collecting perceptions about selected projects from a range of specialists and directed to people who are somehow linked to this matter, including investors, entrepreneurs, platform members or related professionals in fundraising activities. At the end we got six opinions from around the globe, and at least one answer from each specialist category. The survey included closed and open questions. Therefore, we combine the three possible approaches outlined by Mason (1996), focusing on the exact use of particular language and making sense of research participants' accounts. We use the software tool NVivo to improve the accuracy of the analysis process by validating some of our own impressions of the data.

#### RESULTS

Regression analysis produces two types of statistics. One set of statistics provides information about the individual independent variables included in the analysis and summarizes the relationship between each independent variable and the dependent variable. A second set of regression statistics provides information about the regression model as a whole, summarizing the extent to which all of the variables included in the regression model explain variation in the dependent variable. In order to select the most parsimonious set of those explanatory variables, we use the stepwise method which adds predictor variables to the regression that best correlate with the dependent variable and subtracts predictor variables that least correlate. This way one generates a regression equation using only the predictor variables that make a significant contribution to the prediction.

The use of the stepwise method reveals that significant variables are the (8), (12), (13), (14), (19), and if the project belongs to design, games, film&videos, technology or art categories. *Ceteris paribus*, we find a positive relationship between success and (8), (13), (19), and the categories design, art, games and technology; a negative relationship of (7) and (12), (14), and the category film&videos.

Variables	Coefficients	t	Sig.
(Constant)	114,427	24,084	,000
Backers	,289	36,430	,000
Project category: Design	115,538	9,798	,000
Comments	-,092	-6,490	,000
Project category: Games	45,910	3,562	,000
Entrepreneur backed	1,090	4,016	,000
Project category: Fims&Video	-14,637	-3,288	,001
Levels of reward	-1,677	-3,629	,000
Project category: Technology	52,026	2,857	,004
Updates	,747	2,494	,013
Project category: Art	13,770	2,069	,039

**Table 1 - Regression results (OLS with stepwise)** 

After obtaining results from the quantitative analysis, we are able to select some of the projects for a qualitative multi case-based analysis. In this part we try to identify other variables affecting the success of financing, which cannot be tested within an econometric framework. The projects selected are: (1) Tephra: the Steampunk RPG<sup>3</sup> (2) Elevation Dock: The Best Dock For iPhone <sup>4</sup> (3) The Kids on the Street: Season Two! <sup>5</sup> (4) Pen Type-A: A minimal pen<sup>6</sup> (5) COLOR ME OBSESSED, a film about The Replacements (phase 7)<sup>7</sup> and (6) Printrbot: Your First 3D Printer<sup>8</sup>. Projects 1, 4 and 6 are the ones with higher financing rate within the categories that are positively related to success: games, design and technology respectively. Furthermore, project 5 is chosen because it has the highest financing rate in the films&videos, which is the category that holds a negative relationship with the same variable. This initiative stands out since it was the best succeeded in a difficult category. These receive special attention because they represent the essence of the variable that we are trying to explain: success. Project 3 is our black sheep, because it is the closest one in our sample that looks like failure, and helps us understand success by contrasting with it. Note that this project achieved its funding goal, so it cannot be considered as a pure failure. However, it certainly contrasts with projects with the highest financing rate ratio. This one is found in films&videos category, and got precisely 100% of financing rate. We find a several number of projects in this situation so, after this filter, we elected randomly between the project with the lower capital pledged (500 dollars), considering an inferior value of goal as less capable of explaining success. We understand that project 2 should also be included in this part of the analysis, since it is by far the project with the higher amount pledged in our sample.

(1) Tephra is a role playing game developed by Cracked Monologue. The goal was set for a thousand dollars, in exchange for rewards that would function as instruments useful to play the game, including the respective rule book, a dice and/or a dice bag. Higher valued contributions included being integrated in of the game developers or

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<sup>&</sup>lt;sup>3</sup> Project 1 link: http://www.kickstarter.com/projects/257331192/tephra-the-steampunk-rpg

<sup>&</sup>lt;sup>4</sup> Project 2 link: http://www.kickstarter.com/projects/hop/elevation-dock-the-best-dock-for-iphone

<sup>&</sup>lt;sup>5</sup> Project 3 link: <a href="http://www.kickstarter.com/projects/cglenwilliams/the-kids-on-the-street-season-two">http://www.kickstarter.com/projects/cglenwilliams/the-kids-on-the-street-season-two</a>

<sup>&</sup>lt;sup>6</sup> Project 4 link: <a href="http://www.kickstarter.com/projects/cwandt/pen-type-a-a-minimal-pen">http://www.kickstarter.com/projects/cwandt/pen-type-a-a-minimal-pen</a>

<sup>&</sup>lt;sup>7</sup> Project 5 link: <a href="http://www.kickstarter.com/projects/1542689813/color-me-obsessed-a-film-about-the-pelacements-ph">http://www.kickstarter.com/projects/1542689813/color-me-obsessed-a-film-about-the-pelacements-ph</a>

<sup>&</sup>lt;sup>8</sup> Project 6 link: <a href="http://www.kickstarter.com/projects/printrbot/printrbot-your-first-3d-printer">http://www.kickstarter.com/projects/printrbot/printrbot-your-first-3d-printer</a>

being part of the game characters. They aimed to "be able to print a solid first set of hardback books and start shipping them to the many game stores who have asked for them". This campaign was successfully funded at January, 2012, and achieved a total amount pledged of 22.821 dollars with 374 different contributors. This money allowed the project to order 2.000 numbers for the edition. Though only one out of six respondents would invest in this cause, the remaining five would not contribute just for the fact that they have no interest in the game. A platform manager stated that the reason for success is the fact that "they attacked an audience that is typically passionate for this hobby, which is typically open-minded and eager to spend more", while a fundraiser defends that "rewards are well designed and fair, which makes sense for who wants to play the game". According to the same inquired, the project "was in the direction of the needs identified in the market, revealing an effective market research".

- (2) Casey Hopkins developed the Elevation Dock as an accessory for the famous highend Apple's iPhone phone device. The entrepreneur detected this particular need in the market, by realizing that existing docks were not capable and practical for the job it was proposed. The product is thought in line of Apple usual products and users: high quality of construction and functionality. The materials used are "solid CNC machined from solid billets of aircraft grade aluminum" giving the consistency and heavy feeling. Furthermore, the redesign of the connector is performed to minimize the friction for effective charging of the equipment that can be done with or without a cover in the phone, unlike existing products. The creator identifies a series of benefits for consumers such as perfect for standing along a stereo, video conference sessions, or even at as a bedroom charger. It is the campaign with the highest amount of funding for a single project in our sample. The landmark of 1.46 million dollars was achieved at February, 2012. The initial goal of 75 thousand dollars seems only a little crumb comparing to the total pledged value. For this project five out of the six respondents would buy this product, mainly for the 79 dollars level, which offers the Elevation Dock+, a better version of the dock. This reward, after the Kickstarter campaign will eventually retail for the price of 120 dollars, so there are clear advantages for buying at this moment. We also find curious the fact that to use the product one must be the owner of the referred equipment, and it shows that the success of this equipment can make the success of a well designed accessory. According to an investor in our sample, there is an evident preoccupation about the exposure of the information. There is "excellent communication, images, video and FAQ and the rewards are realistic and appropriate". A contribution of another investor adds that "although the product is susceptible to be reproduced at an industrial scale, there is the preoccupation to show the human character of the entrepreneur".
- (3): This project is about the production of a web-series that "take pre-existing movies and we layer our own humor on top". The goal of 500 dollars is set to buy a microphone for every participant in the show, and with it their own audio levels and tweaks", and represents an improvement production quality for present and future series recording. It finished precisely with the same amount of money asked and received. Unfortunately, no one in our sample would buy a reward from this project. A platform manager states that "rewards are not attractive, however the goal was low and they were probably able to convince friends and family to support the cause". An investor and a fundraiser have the same opinion that the "project is basic, but is realistic considering the goal".

- (4): The Pen Type-A is a product design of "a stainless steel replacement for the Hi-Tec-C's cheap plastic housing", which are known for its thin tip and light touch. It is the project with the higher financing rate of its category, with almost 282 thousand dollars pledged, receiving approximately 113 times the pre-defined goal. Five out of our six respondents would invest in this project, all at the 50 dollars reward, and the one who would not invest admits that the contact with the project "makes you want to have the product", but "it is expensive". A platform manager has the opinion that the project is "well presented, and a personal connection with the entrepreneurs is made". The pressure to buy is increased at the point where is stated that for 50 dollars one could get a product that would later be sold for 99 dollars.
- (5): This project is a short movie that tells a "true story of the most influential, always drunk, self-destructive, and yet frighteningly brilliant rock band of all time as told through the eyes of their fans, followers, and fellow musicians", including "love, hate, obsession, tears and vomit". It is the project with the higher financing rate in films&movies category, with 8.275 dollars out of 500 dollars asked. Most successful reward was at 42 dollars, and includes "a dvd screener of the films long before it's available commercially, along with a special than you email from the film's director". They also collected a single contribution for 500 dollars, other for 1000 dollars, and another one for 2500 dollars. Higher valued contributions offered "your name as a character", "the unedited interviews" or even a "small role with at least one line of dialog" in an upcoming movie. In quantitative analysis we observe that this category is the one that holds negative relationship with financing rate. To the same effect of P3, no one of our respondents would put his money in this project. A platform member is of the opinion that "at first, rewards do not seem sufficient and are quite expensive", and highlights the cost of the dvd. On the other hand, he states that "the video, however, is a good teaser for the supporters who want to know more about the project. And it seems that they managed to appeal to some fans of the band and some other sponsors. I think that the word-of-mouth was very important". This is consistent with the fact that almost half of total funding was collected by three single high valued contributions. A fundraiser reinforces that "the project is directed to a very small and specific crowd".
- (6): The Printrbot is a 3D printer designed by Brook Drumm, to be "the 3D simplest printer yet". He states that, unlikely other printers available, "this all-in-one kit can be assembled and printing in couple of hours". Rewards offered different versions of the printer, and the most selected was the 499 dollars level where the "everything you need in one box to assemble a Printrbot Lasercut and start 3D printing". The entrepreneur asked for 25 thousand dollars and attracted 830 thousand from 1808 contributors. Two of our respondents would buy this equipment, even considering the high price to pay. According to a platform manager, "the possibility of having this object at home is attractive and seems to convince whoever has that financial capability". Furthermore, an investor thinks that "in a global perspective, the project is very realistic in the communication and in the goal and reward fields".

## CONCLUSION

We examine information collected from projects in Kickstarter until February 29, 2012 for a better understanding of *crowdfunding* and also to provide comprehension about the critical factors for a project to succeed in these platforms. Results extracted from the quantitative methodology suggest that it is important for success to involve backers and

raise their number; to design a simple rewards system with lower number of levels and finally to be an active entrepreneur within the platform, backing other projects. Furthermore, we discover which categories have more probability of increasing the financing rate. The analysis of case-studies based in experts' opinion reinforces the idea that success is better achieved when there is a possibility of reaching a large crowd of potential consumers or to a niche where one can find a passionate and loyal audience. Probabilities of succeeding rise when tangible and interesting rewards are offered in exchange for collaboration, as proved by most wanted levels of contributions. We find that the enrollment of consumers is extremely important and, at this extent, communication has crucial influence. A project should explain why it is important or different from everything else in the marketplace and why prospective supporters should get behind it, and it should make good use of video and description tools. Showing a campaign where ideas are well structured and the technical characteristics of the product are in detail also increases the probabilities of funding. We also note that there are no warranties in success, as it is a non-linear event. However, there are some apprenticeships one can incorporate from this paper.

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