Crowdfunding: critical factors to finance a project successfully

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Biography

The author of this dissertation, born on March 3, 1988, started his superior academic journey at Faculdade de Economia e Gestão (FEG), at Universidade Católica do Porto, Portugal (UCP). In 2010 he concluded the Degree in Business Management with the average grade of 14 out of 20, starting his Master Degree in the same year.

This report is the result of the candidate’s master thesis project, which has been executed to obtain the degree of Master in the Economics and Management of Innovation at Faculdade de Economia do Porto (FEP) – Universidade do Porto (UP), Portugal. This has been carried out between January 2012 and July 2012, under the supervision of Prof. Doutor Nuno Moutinho.

In the meanwhile, he experienced several professional positions including working as Business Representative at Vodafone Portugal as a working-student, or as an intern at Banco de Portugal during the summer of 2009. Furthermore, since childhood he has developed extra-curricular activities in music, sports, computing and English as foreign language, where he developed other kind of capabilities.

The author’s interests are in the fields of management, innovation, entrepreneurship, finance and marketing, from which emerged the opportunity to choose crowdfunding as a subject for this thesis. He immediately considered it as an attractive topic, with a lot of potential, and was interested to know more about it, especially because of the fact that it is a recent trending tool not well known to people. As the supervisor of this research affirms, it is a sexy topic, since it is easy to like and get people’s interest. Besides, it also fits perfectly with the scope of the degree, since crowdfunding is not only an innovative platform for funding, but also supports innovative industries and projects, promoting competitiveness, efficiency and transparency in our world.

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1 Conference in LUISS Business School, Rome; September 2012 (http://www.continuous-innovation.net/)
3 Conference in Universidade Lusíada, Porto; September 2012 (http://www.ulusiada.pt/is2012/)
4 Conference in Mosteiro S. Bento da Vitória; Porto; June 2012 (http://www.portfoliogradshow.net/)
Abstract

This work 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 propose a taxonomy for crowdfunding and explore evidence on all projects that successfully raised their funding goal on the world’s largest website, Kickstarter, between May 3, 2009 and February 29, 2012. In the meanwhile, more than 1.7 million different contributions turned over 18,000 projects into reality and collected around 128 million dollars. This information is submitted to a mixed quantitative and qualitative methodology, with utilization of econometric models, and complemented with multi-case studies. We also develop a survey directed to people whose professional activity is related to this matter, not only to provide a better understanding of the crowdfunding phenomenon but also to discover what characteristics a project should have to be successful in these platforms. Quantitative results prove that crowdfunding is best suited for funding small initiatives, and discovers what variables have positive correlation with success. In qualitative section we find that success is best achieved when there is a large crowd of consumers or to a niche with passionate audience. It is more likely to occur when tangible rewards are offered, where the enrollment of the consumers is achieved, and where a well designed communication strategy is underlined.

JEL Classifications: E41, G21, G24, G32

Keywords: crowdfunding, crowdsourcing, innovation, entrepreneurship, kickstarter
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1. Introduction

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. Examples of the basis of crowdfunding can be, for instance, in form of lottery tickets or charity contributions. However, a recent internet-based approach, in the form of open call, provides new applications for this concept. It is a subset of crowdsourcing, which represents the outsourcing of a job or process to a large group of people (Howe, 2006). Therefore, by outsourcing the financing to the crowd, crowdfunding transfers finance and marketing risk of innovation to the public, and lowers the minimum efficient scale of making something new.

This is even more important in a context of economic and financial international crisis, where the lack of liquidity and recession is affecting all the agents such as the state, financial institutions, firms or families. Furthermore, an inherent problem that entrepreneurs face at the beginning of their entrepreneurial activity is to attract outside capital (Schwienbacher & Larralde, 2010), regardless whether from bank loans or equity capital (Belleflamme, et al, 2011). In addition, due to current depression, there are difficulties for the banks to decide where to invest their increasingly reduced resources, while it is harder for the entrepreneurs to obtain credit at reasonable rates to turn their ideas into reality. As a consequence, this is also affecting the economy’s renewal of its tissue, as the velocity of capital circulation is slowing down. To this extent, in this research we explore the crowdfunding concept and determine why its contribution might be relevant in the present context. Our aim is to determine which characteristics a project should have to be successfully financed in this recent trend for fundraising.

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). According to the “Crowdfunding Industry Report”, in April 2012 there were 452 crowdfunding platforms active worldwide, and it is expected that this number grows to 536 until the end of the
current year (Massolution, 2012). Together, in 2011, these portals raised 1.470 million dollars and successfully funded more than one million campaigns. The same report estimates that total funding for 2012 is 2.806 million dollars.

Innovative websites are emerging through the web, providing different possibilities of connection among people. The proliferation of the web 2.0 and social networks and the development of portable devices such as smartphones, tablets or notebooks at affordable prices facilitate information sharing, interoperability and user-centered design (Sharma, 2011), and therefore interaction and participation. Our avenues of communication are wider through the spreading of mobile data plans and WiFi terminals that boost the connectivity everywhere and anytime. The result is that the growth of the rate of change suggests that the technology generations are compressing, which means that each technology cycle is smaller than the previous, representing a constant opportunity for the introduction of product and process innovations. Things are changing all the time, assumptions are constantly being challenged, and new business strategies are emerging. Technology is now more sophisticated and available to a wider spectrum of people. What would be impossible five years ago is now available via the swipe of a finger. It is turning tech entrepreneurism cheaper and accessible to everyone. Creative and innovative business models are spreading, and are in the center of some revolutions. The airline industry, for instance, is now very different compared to what it was some years ago. One may notice that processes are being reformulated and performed by different agents (ex: tickets and check-in by the internet), prices are lower and massification is taking place. The internet and social networks allows making things differently, working as an indispensable distribution channel within modern corporate strategy.

Crowdfunding platforms are a novel place for fundraising activities, functioning as online intermediaries between entrepreneurs with ideas and the public with money and expertise. In crowdfunding terminology, they are often referred as creators and funders respectively. The process for funding incorporated in these websites is also different from what we are used to, in addition from the fact that money comes from a crowd instead of an individual. Entrepreneurs utilize them to expose their campaigns, normally through the elaboration of a description and a video that explains it. Together with this,
one is required to define their financial goals (for instance: 5,000 dollars), the deadline (usually from one to two months) and the rewards offered in exchange for desired contributions. For different amounts of investment, different rewards are offered. During this timeline, the project stands in the front of the world. People can visit the campaign on the internet, and users opt to make their contribution or not. At the end of that timeline, project may or may not reach their objective. Only in the situation that success is achieved, money is transferred from funders to creators. In general there are no limits for amounts collected, and it often happens that projects raise more money than their goal. The characterization of the *crowdfunding* process is synthesized in Figure 1. Compared to other ways of funding, *crowdfunding* differs in the way that you don’t need lots of money to invest. According to Dell (2008), if you have ten dollars, then you too can be a venture capitalist. It is obvious that one contribution by itself is not enough, but if we join numerous participations of one, five, ten, twenty or fifty dollars, one may end up with a lot.

The most relevant *crowdfunding* platforms to date are Kickstarter⁵, Indiegogo⁶ or Rockethub⁷ for funding creative initiatives; Sellaband⁸ or Mymajorcompany⁹ for projects related with the music industry; Kiva¹⁰ where people empower people in the Third World with a 25 dollar peer-to-peer loan; Chipin¹¹ where you can collect money; Appbackr¹² specific for mobile application conception or even 33needs¹³ that dedicates to social entrepreneurship. Those are just the top of the iceberg. Through a quick search on the internet, one can find many other examples: a bunch of them are starting and some others soon to be launched. Each one of them makes a different interpretation of *crowdfunding*, which may vary at the scope or field of application. Besides, the primary revenue income for these is a percentage based commission on funds paid by entrepreneurs. Moreover, these websites play a decisive role in the process, since they

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⁵ Link: [http://www.kickstarter.com/](http://www.kickstarter.com/)
⁶ Link: [http://www.indiegogo.com/](http://www.indiegogo.com/)
⁷ Link: [http://rockethub.com/](http://rockethub.com/)
⁸ Link: [https://www.sellaband.com/](https://www.sellaband.com/)
¹⁰ Link: [http://www.kiva.org/](http://www.kiva.org/)
¹² Link: [http://www.appbackr.com/](http://www.appbackr.com/)
¹³ Link: [http://ready.33needs.com/](http://ready.33needs.com/)
allow anyone in the world to get to know different initiatives and enable participation for creation, giving entrepreneurs a chance to achieve their creative goals.

This dissertation is structured as follows. First, a literature review provides the state of the art for this topic. In this section we start by examining crowdsourcing’s literature as a background for the main concept. Then, crowdfunding is explored in three dimensions: a definition of the topic is provided before describing some of the main researches about the issue to date. At last, we present a theoretical framework in the fields of innovation management and organizational networks.

Afterwards, we design a taxonomy for crowdfunding, as a classification of the various types of crowdfunding based on the nature of the reward given to the individual who invests in a project of this nature.

Furthermore, we start with our quantitative and qualitative research. To the extent of this work, we decide to explore Kickstarter’s platform, in view of the fact that it is by far the largest portal of crowdfunding in the world to date. Our analysis is based on information collected from the portal’s website, representing a sample of 18,430 financed projects in the past 2.75 years, from May 3, 2009 until February 29, 2012. In the quantitative analysis a statistical and econometrical approach is performed to the data, which is complemented with the qualitative selection and analysis of six case studies about six different projects financed in this platform. Among other information, the case studies are made based on a survey we built and sent to be answered by specialists connected to this issue, and aims to provide information that cannot be withdrawn from quantitative section. We end by exposing our findings and posting our conclusions.
2. Literature review

Our purpose in this section is to provide understanding of the crowdfunding phenomenon, based on previous work done in this field. Here, we aim to answer the following questions: (1) what is the exact meaning of crowdfunding? (2) why is the study of success in these platforms something worthwhile?

Crowdfunding is seen as a part of a broader concept referred as crowdsourcing.

2.1. Crowdsourcing

The term was first introduced and defined by Howe (2006) in Wired Magazine, as representing 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. Essentially, it characterizes the act of outsourcing some process or a part of production to a crowd. 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, 2006). As Kleeman and 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. According to these authors, this happens in the form of an open call over the internet, with the intention of animating individuals to make a contribution to the firm's production process for free or for significantly less than that contribution is worth to the firm. This is an important improvement for the concept, as it shows the economic added value of this participation for the companies, as they gain efficiency, for which at the same cost or slightly more they can do more or a lot more.

Crowdsourcing is considered as an example of open innovation. This concept, coined by Chesbrough (2003), means that valuable ideas can come from the inside or outside of the company, and can go to market from inside or outside of the company as well. It also assumes that firms can and should use both external and internal ideas and paths to market (Chesbrough, 2003). Nevertheless, it is not an open-source practice. Brabham (2008) argues that problems solved and products designed by the crowd become the
property of companies who turn large profits off this crowd labor. The difference is that *crowdsourcing* rewards financially the contributors, though in a less compensating way than integrating those people in their enterprise (Brabham, 2008). According to Howe (2008), people contribute for little or no money, and rewards can’t always be measured by the dollar or the euro. This author states that sometimes the crowd “works” just for the desire to create something from which the larger community would benefit. Open source production works precisely against this notion by liberating code, making it available to everyone (Brabham, 2008). Howe (2008) also states that people contribute with their excess capacity to indulge something they love to do. The time people once used in leisure recreation is now exploited in fulfilling (and sometimes profitable) activities. He named this as “spare cycles”, from which users perform their contributions in their free time, where a distinction from professional and amateur users becomes indistinguishable. Users involved in these actions are often seen as lead users, who are users of a product or service that currently experiences needs that are still unknown to the general public, and who would also benefit if a solution for these needs would be implemented (Hippel, 2005). It is an opportunity to involve the consumers to participate, as the correlations found between innovation and lead user are highly significant (Hippel, 2005). These participants will also tend to be more engaged and more rabid fans of the brand than the average customer (Kornish, 2012), as they have interest in taking over the production process (Kleeman & Gunther, 2008). For instance, **crowdsourcing** is utilized to the build of an extensive encyclopedia into small chunks. We know it today as Wikipedia, a useful tool in our everyday life. So, as Toffler (1980) predicted, in The Third Wave, consumers exercise much more control over the creation of the products they consume, becoming a mix of producers and consumers, in a word: “prosumers”. Three examples of *crowdsourcing* are presented below, for a better understanding of its potential:

a) Threadless.com is a website that sells design t-shirts. The main difference to a traditional store is that, beyond being an exclusive online store, is that the processes of designing and selection of production is performed by the users of the site. Designers can submit their own designs, and the users vote in them. T-shirts with best scores are the ones which are elected to be produced.
b) Innocentive.com is an online platform created to promote problem solving in R&D, innovation and product design processes. Here, highly complex problems are described by the clients who face them, and monetary rewards are offered to people who can solve them. The probability for achieving results is higher because the community includes millions of people, who are called communities of problem solvers. Clients pay only for complete results while solvers may earn large sums of money and also obtain awards to promote themselves in their fields by beating those challenges.

c) Barack Obama, in his campaign to the presidency of USA, created a website where people could suggest and vote in questions directed to him, including several topics such as education, jobs, budgeting, among others. The most popular questions were answered by him. Thanks to the “Neighbor-to-Neighbor” tool on My.BarackObama.com, Obama’s supporting volunteers were able to reach far more people within their community in much less time than before (Abraham & Behrendt, 2010). The same concept was transferred to the official website of the White House\textsuperscript{14}. Obama also rose around three quarters of billion dollars in a crowdfunding action. Kappel (2009) argues that the campaign’s ability to mobilize and monetize supporters using the internet is often referred as the main factor in Obama’s victory.

In the previous cases, design and selection; problem solving; journalism and funding, were jobs outsourced to the crowd. Positive impacts of these kinds of initiatives are turning crowdsourcing into a common strategy in several businesses. Crowdsourcing models are being adopted by big enterprises such as Philips, P&G, Nokia Betalab, PepsiCo, Dell, Starbucks and many others. More examples can be found at Howe’s blog\textsuperscript{15}, where he used to keep track of fresh examples but, as he states, they began to multiply so rapidly, he gave up trying. As crowdsourcing travels from fringe to mainstream, this phenomenon is inflicting disruptions which are affecting the direction of the shift of change in the economies. New processes are replacing the old ones, and are becoming indispensable, while others are perfectly complementary to established activities. In this practice the concept of creative destruction popularized by Schumpeter (1950) is observed, whereby the new product or method displaces the old (Elliot, 1980). New industries are emerging and older ones struggle to adapt. Crowdsourcing is

\textsuperscript{14} Link: \url{http://www.whitehouse.gov/OpenForQuestions} \\
\textsuperscript{15} Link: \url{http://crowdsourcing.typepad.com/}
not only part of the disruption but also part of the foundation on which new order is built (Howe, 2008). The same author asserts that crowdsourcing’s limits are determined by people’s passion and imagination, which is to say, there are not any limits at all. In his books one can find plenty of other crowdsourcing examples, and the creative approach employed at the open network. This idea leads us to the core concept of this dissertation.

2.2. Crowdfunding

2.2.1. The definition

Crowdfunding is defined as a collective effort by people who network and pool their money together, usually via the internet, in order to invest in and support efforts initiated by other people or organizations (Ordanini, et al., 2009). In the same logic of crowdsourcing, we are able to affirm that in crowdfunding, the job of financing is the one that is outsourced to an amateur large group of people, instead of professional parties support, seen at individual or institutional levels. If a crowdsourcer taps people’s excess capabilities, crowdfunding, by contrast, taps their spare dollars, pounds or pesos (Howe, 2008). The basic idea is always the same: instead of raising money from a small group of specialized investors, entrepreneurs try to obtain it from a large audience (Belleflamme, et al., 2011).

Although this idea is gaining a lot of relevance nowadays it is not, nevertheless, new. Its roots are ancient and intimately related with philanthropy actions. After all, contributions in form of donations to charity exist since the human being knows himself, and their nature is also based on collective collaboration. Reinterpretations of this concept are being implemented with the assistance of the previously described web portals. The power of connecting people provided by the internet is constantly and rapidly changing our environment. Crowdfunding is changing the way the money is distributed in the economy and financial systems are designed. “We’ve all had that idea. The one that’s too crazy, too costly, or just too big. If only we had the money, if only we had the time. Before you know, the dream stays just that: a dream” (Kickstarter Blog, 2012). This recent trend might just be the incentive one needs to go further. Its success has been observed in areas where revenue and budgets are suffering cuts,
especially in creative industries such as music, movie or publishing. Howe (2008) remembers that, to make a commercially viable album or movie, it generally requires a large up-front investment, which is normally provided by intermediaries who take large profits from future revenues. **Crowdfunding** allows artists to appeal directly to consumers, giving possibilities to the people who will ultimately consume the product to decide what should be created without being tied down with the industry bosses (Howe, 2008). Appealing and interacting directly to the consumer automatically avoids also a common error in designing a business model, which is related to the understanding of the needs of the customer. Sometimes, companies are prepared to offer quarter inch drills when what people really want are quarter inch holes (Levitt, 1960).

As the reader may notice, most sources mentioned in this work are very recent. This occurs because the core concepts of **crowdsourcing** and **crowdfunding** were formulated only very recently, and there is not much bibliography and scientific work about them. Most information about **crowdfunding** is scattered over the internet and within social networks. The earliest known citation dates from 2006 and was first applied by Sullivan (2006) in his group blog on the internet. Most of existing **crowdfunding** studies try to explain some of its components through the analysis of a selected platform or through exploratory interviews to achieve some findings, while others offer a construction of economic models contemplating differences found in this trend. We offer below a brief presentation of the ones we considered more relevant for our study.

**2.2.2. Main Studies**

To start with, it is important to set differences between two types of **crowdfunding**: **ex-ante** and **ex-post**, distinguished by Kappel (2009). **Ex-post crowdfunding** occurs where financial support is offered in exchange for a completed product. For example, the seventh Radiohead band’s album, named “In Rainbows”, was released in October 2007 as a digital download, and customers could order it for the price they saw fit. The crowd would finance the product after its completion. On the other hand **ex-ante crowdfunding** happens when financial support is given on the front end to assist in achieving a mutually desired result. Further analysis in this work is based on the **ex-ante** approach,

16 In 2009, more than 15,000 people lost their jobs in newspaper industry: [http://news-cycle.blogspot.com/2009/12/more-than-15000-people-have-lost-their.html](http://news-cycle.blogspot.com/2009/12/more-than-15000-people-have-lost-their.html)
since the achievement of the level required of finance is going to determine if the project will be launched or not. *Ex-ante approach* is a game changer vision. The fact that the project does not require to be completed allows the test of creative and innovative ideas that would seem risky to invest without further warranties. Kappel (2009) states that, for instance, *ex-post* activities offer very little to lesser known artists without pool of supporters.

Other key research in this field is *The Geography of Crowdfunding*, developed by Agrawal *et al* (2011). This work is based on the music *crowdfunding* platform Sellaband. The authors’ data supports that the average distance between artists and investors is of about 5,000 kilometers. According to this paper, the benefits of the online platform seem to eliminate most distance-related economic frictions. Their findings suggest that investment propensity increases as the entrepreneur accumulates investment, and local investors are more likely to invest at early stages than later. Also, friends and family tend to invest early in the funding cycle and non-friends and family tend to invest later. This vision is also shared by Brian Meece of RocketHub platform, as he affirms that typically, 95% of contributions in the creative space come from the first and second level of friends circles (Lawton & Marom, 2010).

Henceforward, Ordanini *et al* (2009) address the questions “why” and “how” do consumers turn into *crowdfunding* participants. The results suggest that the crowd is driven by other kinds of motivations than regular investors and that crowd motivations and roles differ concerning the platform. In their study, conclusions refer to that consumers who participate in *crowdfunding* websites like engaging in innovative behaviour, since they like to be first and to use highly interactive tools. Normally, the first funders to invest identify themselves strongly with the proponents of the project. Consumers contribute for the desire of patronage, desire for social participation or desire for investment, and have innovative orientation to try new models of interacting and social identification with the content. Regardless the motivation or the size of the investment, the behaviour of the agents follow a consistent path, consisting in three distinct phases. In the initial phase, called “friend-funding” there is a quick and significant flow of capital by those highly involved and close to the proponents of the campaign. Then, investment slows down, in the “getting-the-crowd” phase. Progress is
achieved mainly by gaining visibility through word-of-mouth communication and information cascades. Authors underline that this is the most delicate phase since many projects are never able to leave it. Only for a few moments there is the so-called “engagement moment”, which triggers a chain reaction and facilitates rapid growth towards investment target. People in this last phase do not have any original connection to the initiative, but read about it and got interested. After this, sometimes there is a “race to be in” phase, where people speed up their investment decision while there is opportunity.

Belleflamme et al (2011) develop a model that associates crowdfunding with pre-ordering and price discrimination, where this first group of investors, the crowdfunders, and the consumers who wait that production takes place before purchasing directly. Their conclusions show that compared to external funding, crowdfunding has the advantage of offering an enhanced experience to some consumers and, thereby, of allowing second-degree price discrimination and extract a larger share of consumer surplus. The disadvantage is that the larger the amount of capital asked, the larger pre-ordering price and the less profitable the menu pricing scheme. Additionally, the study shows that crowdfunding is optimal only for lower levels of finance. This article concludes that crowdfunding can be a vital asset for artists or entrepreneurs in need to present of a specially targeted audience, and may be viewed as a way to develop corporate activities through the process of fundraising.

Massolution (2012) and the portal crowdsourcing.org, an organization that describes themselves as a “neutral professional association dedicated solely to crowdsourcing and crowdfunding, offering the largest online repository of news, articles, videos and site information about these topics”, released in May 2012 the first ever “Crowdfunding Industry Report”, a research that provides an in-depth analysis of crowdfunding market trends and composition, and an overview of operating platforms, based on 170 survey responses sent to these entities. In this study it is aggregated the overall value of the crowdfunding market, as are explained different types of crowdfunding. According to their data, in contrast to popular belief that the first 25% of funds take longer to raise than the last 25%, the data shows it takes 2.84 weeks on average to raise the first 25% of the funding goal and 3.18 weeks on average to raise the last 25% of the funding goal.
Lastly, according to Gerber et al (2011), creators are motivated to participate to raise funds, receive validation, connect with others, replicate successful experiences of others and expand awareness of their work through social media. Besides, the same authors argue that funders are motivated to participate in order to seek rewards, to support creators and causes, and to strengthen connections with people in their social networks. In a global perspective, participation may have a significant effect on the economy by encouraging a more diverse set of people to start small entrepreneurial ventures, influencing the ideas that are introduced into the world (Gerber, et al, 2011). If social networking changed how we allocate time, *crowdfunding* will change how we allocate capital (Lawton & Marom, 2010).

### 2.2.3. Innovation theory

There is still a lack of a unifying holistic framework for enhancing our understanding of *crowdfunding*, 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 literature, which provide us with some interesting insights.

Hereafter, an innovation framework is introduced. In the same extent of *crowdsourcing*, open innovation and lead user theories are also applied in *crowdfunding* models, and these issues are well covered in previously described articles. 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 a 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 on the introduction of a better quality version of the existing products and/or of their production processes, as a 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. Moreover, crowdfunding is not only an innovation in 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 the contributor, that changes from an individual to a group. However, it is in the centre 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, et al, 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), Gans et al (2002) or Osnabrugge (2000).

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 consumers and entrepreneurs, then its campaigns are able to reach a larger group of pioneer people at its beginning, which means 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, exploring the way it bases itself on different kinds of networks for organizing people and processes. A metaphorical observation between these concepts is provided, keeping in mind that, with this method, we gain a partial but enriching perspective to look at this subject. Rhizome is a concept with origin in botany. According to the Britannica Encyclopedia, it is an underground plant stem capable of producing the shoot and root systems of a new plant. This capability allows the parent plant to propagate vegetatively, and also enables a plant to perennate underground. In some plants, the rhizome is the only stem of the plant (Britannica Online Encyclopedia, 2012). Moreover, this concept is brought to philosophy by Deleuze and Guattari, in a futuristic perspective that is now gaining relevance in organizational theories. The authors state that a rhizome “ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles”. “It forms a bulb; it evolves by subterranean stems and flows, along
river valleys or train tracks; it spreads like a patch of oil” (Deleuze & Guattari, 1972; 1980). The same authors apply this idea to the way people think, and make contrast between rhizome and arbolic thought, which represents “linear, hierarquic, sedentary, vertical, stiff, full of segmentation and striation”. According to their book, “arbolic thought is represented by the tree-like structure of genealogy, branches that continue to subdivide into smaller and lesser categories”. By the contrary, rhizomatic thought is “non-linear, anarchic, and nomadic”. Rhizomes “create smooth space, and cut across boundaries imposed by vertical lines of hierarchicies and order”. “Rhizomatic thought is multiplicitous, moving in many directions and connected to many other lines of thinking, acting, and being”. To this effect, rhizomatic thinking “deterriorializes arbolic striated spaces and ways of being. Rhizomes are networks and cut across borders. They build links between pre-existing gaps between nodes that are separated by categories and order of segmented thinking”. (Deleuze & Guattari, 1972; 1980). It is possible to relate arbolic and rhizomatic thought with substance and process thought respectively, as the two possible ways to make sense of reality and look at organizations (Graça, 2003). The internet is widely acknowledged for being a rhizomatic structure. Hamman (1996) applies the principles outlined by Deleuze and Guattari to the internet and concludes that internet is a rhizome. 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) or Nonaka (1994), 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 the possibility for organizing, reaching and coordinating people. And it does it very quickly. In crowdfunding, it connects people with money to the people who needs it. This author underlines that crowdsourcing is not about technology, it 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). Thereby, 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 these interactions. Other significant rhizomatic structures in this process are the social networks (Facebook, Twitter and others), e-mail, blogs or online newspapers. Entrepreneurs are able to advertise 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 tries to explain how connections are made, crowdfunding uses these rhizomatic structures for connecting people in modern fundraising methods. The rhizome connects any point to any other point, and it is “an acentered, nonhierarchical, nonsignifying system without a general; it has no beginning or end; it is always in the middle, between things, interbeing, intermezzo”. (Deleuze & Guattari, 1972, 1980). Crowdfunding allows multiple combinations between elements, which are dynamic and complex, and sometimes unlikely, unexpected and unpredictable. Besides, each agent uses it according to its interest. The tree imposes the verb 'to be', but the fabric of the rhizome is the conjunction, 'and, and, and'. In addition, the middle is by no means an average; on the contrary, it is where things pick up speed. The rhizome operates by variation, expansion, conquest, capture, offshoots (Deleuze & Guattari, 1972, 1980). This sentence fits perfectly the scope of the concept we are trying to explain. The linear tree idea can be applied to normal alternatives of funding, like a bank loan, which follows a clear defined pattern while the rhizome applies to crowdfunding as a method with completely different dynamics.

In these models, creativity is extremely preponderant to raise the interest from the crowd. Sternberg and Lubart (1996), define creativity as the ability to produce work that is both novel and appropriate. Besides, Amabile (1996) affirms that it is a dichotomous variable, able to be defined in terms of a process, person and product. Styhre’s (2006, 2008, 2009, 2010) conclusions point that “creativity is an act making connections and constituting hybrids and is not primarily what is beginning the new”, as it is “socially and culturally embedded, and dependant on the outcomes from negotiations, collaborations and networking”. In this paper, he also states that the predominant view of creativity is based on rational thinking, “rather than the forms of empiricism
advocated by James and Deleuze”. Furthermore, we try to fit crowdfunding and its impact in the Brown’s (1989) “confusional model of creativity”, that is constituted by three steps: 1) an unsolved problem 2) the creative process 3) the creative product. Crowdfunding introduces differences in step two, where, according to Styles & Seymour (2004), “a miracle occurs”. This called miracle is rationalized by the crowd effect. Everyone has ideas that most times are never turned reality. So, by allowing anyone to pitch their ideas easier and at low risk, there are more ideas to be tested, in which some of them will prevail, in a space where there is no center neither periphery, everything is in between, and there is opportunity for serendipity to meet with sagacity within heterogeneous networks. Paraphrasing Styles & Seymour (2004), “innovation requires nonlinear creativity, which could be considered the antithesis of normative checklists”. The same authors argue that creativity is related to complexity theory, “when the initial conditions of a dynamic system can have a dramatic impact on the future or outcomes of the system”. It is possible to conclude that, in a linear path, rhizome is required for creativity, which is required for innovation, which is required for generating competitive advantages, which is required to success in crowdfunding projects.

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 different 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).
3. Taxonomy of crowdfunding

The definition of *crowdfunding* provided by Ordanini *et al* (2009) was later refined by Lambert and Schwienbacher (2010), stating that it “involves an open call, essentially over the internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes”. The novelty of this explanation relies on the segmentation of different types of *crowdfunding* according to the types of the compensation that creators give to funders. Massolution (2012) identifies four main categories of *crowdfunding* platforms in the “Crowdfunding Industry Report”: (1) donation-based, for philanthropic or sponsorship purposes; (2) lending-based, as a peer-to-peer and peer-to-business loans; (3) equity-based, for financial and participation return; and (4) reward-based, for non-monetary rewards that are normally the result of the entrepreneurial activity. We remind that this report also shows that in April 2012, there were 452 *crowdfunding* platforms active worldwide, and that the majority of them are in North America and Western Europe. Below, we provide a brief framework and an explanation about each one of the four alternatives.

3.1. Donation-based

According to Massolution (2012), *donation-based crowdfunding* is as a “model where funders donate to causes that they want to support, with no expected compensation”. The type of projects that fit this category pertains to social entrepreneurship causes, without profit objectives. This implies that there is no financial return to the people that put the money in, and when a physical reward is offered it is only symbolical towards the value of the contribution. We consider that the reward of participation in these causes is the identification with the success of the campaign that is being promoted, and/or the feeling of contributing for a better world. Greenunite\(^{17}\), Fundrazr\(^{18}\), 33needs\(^{19}\), Lets\(^{20}\), Preenchaestavida\(^{21}\) and many others impersonate this type of *crowdfunding*. The report concludes that donation-based model is the one that attracts

\(^{17}\) http://www.greenunite.com/
\(^{18}\) https://fundrazr.com/
\(^{19}\) https://33needs.com
\(^{20}\) http://www.lets.bt/
\(^{21}\) http://www.preenchaestavida.com/
less funding per project, and is “best suited for cause based campaigns that appeal to funders’ personal beliefs and passions”. This model raised 676 million dollars in 2011, and is expected to grow 50% in 2012.

3.2. Lending-based

Massolution (2012) considers **lending-based crowdfunding** as a model where “funders receive fixed periodic income and expect repayment of the original principal investment”, as a loan that one gives to another and expect the reimbursement of the same value over a period of time. A clear and successful example of this is Kiva[^22], that makes use of the “internet and a worldwide network to let individuals lend as little as $25 to help create opportunity around the world”. In their website one can also find that “lenders combat poverty daily by making small loans to borrowers” that are mostly located in the Third World, where $25 dollars can make a difference. They believe “in fair access to affordable capital for people to improve their own lives”. It is the smallest category in terms of crowdfunding platforms, and Massolution (2012) predicts a 70% growth for year 2012.

3.3. Equity-based

The definition provided by Massolution (2012) states that in **equity-based crowdfunding** model “funders receive compensation in the form of fundraiser’s equity-based or revenue or profit-share arrangements”, what is to say that the investor becomes a shareholder in the company, with future interest in the growth of the enterprise. The funder may have the right to participate and vote on some decisions, being entitled to dividends out of eventual revenues, or even to get a share of the value in the company if one sells its participation. Furthermore, the report shows that equity-based crowdfunding is the most effective practice for funding digital goods like software, music and video, and on average raises the largest sum of money per campaign comparing to others. More than 80% of the campaigns rose above 25 thousand dollars in the equity-based crowdfunding, and it is already the fastest growing category.

[^22]: http://www.kiva.org/
Legislation varies from country to country, and in each one of them there are obstacles of this nature that limit totally or partially the scope of equity-based crowdfunding. In the case of the United States, Kappel (2009), Lawton & Marom (2010), or Belleflamme et al (2010) point out that certain legal issues are blocking the development of these kind of initiatives. As the authors state, one is not allowed to ask the general public to collectively fund a startup in exchange for equity, unless they receive prior authorization from their national securities regulator, making this kind of crowdfunding very difficult. Nevertheless, the rise of crowdfunding is not going under noticed in the United States. During the completion of this work, some exciting developments emerged concerning this issue, especially about equity-based models, due to the sign into law of the “Jumpstart Our Business Startups” (JOBS) act by president Obama at April 5, 2012. This law is intended to encourage funding of small business in this country.

This represents the final step for legislation that legalizes crowdfunding in start-ups by non-accredited investors (Clark, 2012). In short, everyone can invest in ones initiative up to the limit of one million dollars per year in exchange for equity without making a public offering, a step that would previously cost thousands of dollars. It also stipulates that an investor can only invest the greater of two thousand dollars or to a maximum of ten percent of their annual income. Furthermore, it is also required for the start-up to provide detailed information to help potential investors decide to invest. However, this collection can only be made in platforms previously approved by the American Securities and Exchange Commission (SEC). This group is on mission to find the best way for the industry to develop effective self-regulation, best practices and investor protection, and is to include members of the crowdfunding industry who will collaborate with legal, securities and SEC experts. It is envisaged that this system is put in practice on January 1, 2013.

The new law legalizes a participation in the equity by the public. In this same attempt to recognize crowdfunding as a serious alternative for fundraising, crowdsourcing.org developed the “Crowdfunding Accreditation for Platform Standards” (CAPS). The accreditation is “designed to protect both crowdfunding (people pledging or investing capital) and fundraisers (people raising capital), with the mission to foster the
sustainable growth of *crowdfunding* industry to provide much needed capital for projects and initiatives, start-ups and small business”. Until May 3, 2012, seventeen platforms were already recognized with the ribbon of accreditation. Carl Espotsi, a *crowdsourcing.org* manager, quoted by Empson (2012) states that around two hundred *crowdfunding* platforms are expected to apply for accreditation until the end of the year. The accreditation is expected to accept all types of *crowdfunding* platforms, but is developed above all for equity models because they are more complex and need to be regulated. This ribbon is intended to give consumers more confidence to invest their money in eligible platforms.

### 3.4. Reward-based

Finally, Massolution (2012) refers to the *reward-based* model as a situation where “funders’ primary objective for funding is to gain a non-financial reward such as a token or in the case of a manufactured product, a first edition release”. The reward is implicit in the nature of the project. For instance, if the idea of the campaign is to produce watches, the rewards certainly include those watches, as a pre-buy of that item. Though we acquaint for the other types, we consider that this version is the one that represents the true essence of *crowdfunding*. In this model, the finance of projects does not mean giving away equity. Normally, after the collection of the funding, the project becomes independent from the platform and from investors. The unique obligation of the entrepreneur is to fulfill in time with the rewards promised in exchange of the contribution, which are usually the result of the self entrepreneurial activity. In these situations, there is place for a strong commitment to a steady growth, instead of giving priority to quick profits normally imposed by shareholders. It is the implemented category with best results and most developed to date (Massolution, 2012). The report from the industry shows that this is the largest *crowdfunding* category, and together with donation-based, it is the “best suited for cause based campaigns that appeal to funders’ personal beliefs and passions”. Our further research is based on Kickstarter, which corresponds to this type of *crowdfunding*.

The selection of Kickstarter as our base for analysis stands not only on the fact that it is the largest *crowdfunding* platform existing to date, but also because we find that this portal represents at its best the power and the history of internet based *ex-ante*
crowdfunding. We could not find any other platform with the dynamic and the dimension observed in Kickstarter. The diversity of the initiatives and the vast sample of success cases allow us to perform a meaningful approach compared with any other possible options.

Kickstarter was funded in April 28, 2009 by Perry Chen, Yancey Strickler and Charles Adam, with the faith that a good idea, if well communicated, could spread fast and wide. Besides, they also believed that a large group of people could be a tremendous source of money and finance. However, it was not until 2010 that this website achieved a significant status. Since this moment, it has been rising at high pace. The numbers for 2011 are impressive\(^\text{23}\). In this year, 27,086 projects were launched, from which 11,836 collected at least 100% of the capital required, representing a total of almost 100 million dollars pledged and a 43.7% success rate. More than one million rewards were offered in exchange for financing, representing an average of 86 dollars per contribution. In average, 32 projects per day were completely funded there. Comparing with the previous year - 2010 - there is the observation of an obvious expansion: there are more 243% projects launched and more 303% successful initiatives, materialized in the pledge of a positive difference of 71 million dollars. We are aware that the year 2012 is keeping the stakes up, and it promises the continuing of a steady growth.

In fact, a lot of entrepreneurs with creative and innovative ideas found this portal as the perfect partner to start their business ventures. In 2011, Kickstarter launched projects such as a pop-up restaurant that changes every month, the creation of real-life portals, the set of a giant guitar on fire, and the turning of a cottage into a musical instrument. “These projects make us believe anything can happen.” (Kickstarter Blog, 2012). But, how does this portal work?

Kickstarter is a generalist, for-profit and reward-based crowdfunding platform, and is directed to for-profit initiatives that belong to the creative industries. Creators are able to pitch projects with nature in one of the following categories: art, comics, dance, design, fashion, film & video, food, games, music, photography, publishing, technology and theater. In the website, it is possible to observe a great amount of information about the projects that were successful, and those that are in progress. For each one of those, it

is possible to look for a diversity of data, such as the goal in dollars, the capital pledged in dollars, the name, the description and video of project, the number of backers, the different levels of reward or the number of backers in each stage of reward. Each project has a standard designed page, where people can easily access, in the form of internet link (easy to divulgate around journals, blogs and social networks), and where they can get to know the project and see in which state it is. Figure 4 is a print screen from one random project page, and allows us to be familiarized with the way information is displayed. It is also available a page that lists all funded projects.

The platform provides entrepreneurs the opportunity to describe their idea, to define the amount of money they aim to raise, and the time window (from 1 to 60 days\textsuperscript{24}) they need to achieve it. Creators must also define and describe the rewards offered in order to convince the public. Usually, there are different types of rewards that vary corresponding to the value of the contribution. These rewards are expected to be the product of the self entrepreneurial activity. Evidence suggests that funders are aware of the exchange of value (Gerber, \textit{et al}, 2011) of those proposals, meaning that a higher contribution is given when a better counterpart is proposed by creators. Inside the same project there are different stages of contribution – rewards can be priced anywhere from a minimum of 1 dollar and a maximum of 10.000 dollars. Creators must also specify the estimated date for the delivery of the rewards. As a reward-based platform, the prize given to investors is always in a pre-buy regime, as the purchase is made before project investment is started. 

\textit{Crowdfunding} investors have the right for the first and/or special edition release of products/services pre-ordered. Some projects keeps operating in their own or in other channels after their foundation. In some project pages, after financial deadlines end, it is commonly seen something as “if you missed our Kickstarter campaign, you can find us on our own website”. There is possibility for interaction with both parties, through comments and updates tools. Comments about the project can be made by funders, and updates are performed by entrepreneurs to keep everyone up to date with the campaign. To help entrepreneurs, Kickstarter developed an online guide to build out a project page. A complementary blog of the platform and social network institutional pages are regularly updated with content related with them, such as project promotion, projects on the news, statistics, interviews, and so on.

\textsuperscript{24} Kickstarter recommends that projects should raise their funds in 30 days or less.
In Kickstarter one does not find projects where money is given to social projects, neither will participation in capital or management be offered. When a project is fully funded, it becomes independent from the public and from the platform. The money is only transferred if the project becomes successful, in an all-or-nothing funding model. In other words, if the creator does not meet his funding requirements within the time frame previously set, he earns nothing, and funders keep their money. So, the security for funders is reinforced, because money is not debited if the project does not hit its objective. At the end, the platform gets a 5% commission of the capital pledged. Amazon Payments, as the company responsible for the payment system and preventing fraud, charges an additional 3-5% commission. This system fits the needs of the specific requirements of the platform, as it makes possible for the transaction to be made (or not) at the date of funding, and also enables contributions from beyond boundaries. On the other hand, it is harder for the submission of foreign campaign, as it forces the entrepreneur to be a permanent United States resident with a social security number, bank account, state-issued identification and major credit or debit card. This happens because Amazon Payments is the only processor that currently supports these requirements, and currently Amazon Payments does not support non-US recipients\(^\text{25}\).

To be approved within the platform, the first step is for the entrepreneur to submit the following information: (1) What is your project? (2) What rewards would you offer? (3) Where can we find out more about you and your project? (4) Which category fits your project? (5) How much money would you like to raise? (6) How did you hear about us? After providing this, for quality control reasons, the Kickstarter team will assess if the project is eligible according to their guidelines to be evaluated by the crowd. These proceedings determine if the campaign will be approved to enter the crowdfunding process.

In short, a crowdfunding platform like Kickstarter provides not only an innovative process for funding, but also a means for supporting innovative projects across boundaries, promoting competitiveness, efficiency and transparency of economies. It is a place where dreams can come true, every participating feels part of something bigger and everyone is winning.

\(^{25}\) http://www.kickstarter.com/blog/amazon-payments-and-us-only
3.5. Hybrid-based

Though we agree with the four-type discrimination by Massolution (2012), in our perspective a fifth possibility should be introduced in this typology as a hypothesis for further development. That is proposed as a hybrid-based crowdfunding combination between one of the previous four crowdfunding categories combined with other financing method. Financing methods such as own money; friends, fools and family; bank loan; business angels or venture capital. For instance, one could use reward-based crowdfunding achieve fifty percent of the required funding amount, and the other half could be raised with a loan at the bank. We should define this as (5) hybrid-based crowdfunding, where other source of financing provides a substantial percentage of the total volume needed in combination with one of the other types of crowdfunding. Though we do not see it implemented in any known platform, it is a highly reasonable way to leverage the collection of higher amounts of money. A combination between reward-based crowdfunding and a bank loan for example seems to be very promising. Given this, we are able to propose this five element taxonomy for crowdfunding, based on considering the type of project and the reward given through investment, which is summarized in Figure 3.

In short, it is still not clear if there is a superior category towards the other, as they are developing at different life cycles. While the reward system is in practice for about three years, the equity-based is only going to be officially launched in the next year. It is certain that equity systems may be more attractive for investors, as they play part of the business and may expect future returns. Also, each project fits different requirements, turning that some will fit best in certain categories, and therefore, they are complementary too each other. In the reward-based model, equity stays in the hand of the entrepreneurs, and the fulfillment of obligations are expectably easy to achieve. It is proved that it is possible also to collect a lot of money in this model by itself. The nature of the project itself and the direction the entrepreneur wants to give it is still going influence the type of the financing model. We can certainly expect, still, to see a boom in the equity-based and possibly hybrid-based crowdfunding portals, and a bubble of startup entrepreneurship financed by these methods. In the future, crowdfunding can undoubtedly be the incentive that will launch the “next big thing” like Google.
4. Methodology

4.1. Introduction


Yin (1989), suggests that a choice between case studies and other empirical methods depends on the kind of research question being posed; the extent of control a researcher has over actual behavioral events; and the degree of focus on contemporary as opposed to historical events.

The first condition boils down to the simple “who, what, where, when, why and how” questions of most research. “Who”, “what” and “where” questions are well addressed through quantitative analysis. Case studies suit the “how” and “why” questions, better as they are explanatory rather than exploratory or descriptive. This work will combine the advantages of both quantitative and multi-case analysis, with the aim to contribute for the body of knowledge about this phenomenon.

As pointed out by Yin (1989, 1993), case study design is ideally based on a well-grounded theory and set of testable propositions. Findings are generalized to that theoretical base according to the degree of support the findings provide to the original propositions. Confidence about the wider validity of conclusions is increased if findings apply to multiple cases. It can enhance analytical generalization through replication, especially when the additional case findings support a given theory and contradict a well justified rival theory. However, the use of multiple cases does not increase “representativeness” of “samples” as in statistical generalization logic.

Eisenhardt (1989, 1991) working in the business management field uses multi-case studies to promote theory building as a primary goal. While acknowledging the role of good research questions and theoretical constructs, Eisenhardt (1989) argues that propositions can be developed during data collection, rather than prior to it. Because the aim is to obtain a rich understanding of the cases in all their complexity, insights
obtained during data collection can be used to inform the theory. Qualitative researchers undertaking case studies on individuals and small groups place much importance on prior preparation, rather than simply allowing the case to speak for itself (Stake 1995, Harper 1992). We stress that, given the novelty of the phenomenon under investigation, in the extant when it has not received adequate coverage, information is collected from secondary sources such as press reports, information at crowdfunding platforms or over the internet. In this work, we will pursue the following steps:

(1) Perform quantitative analysis, and take out respective conclusions.

(2) Extract a sample from step (1) for case study analysis, according to Yin (1989) and Eisenhardt (1989):
   a) Present a clear and adequate specification of the theoretical issues;
   b) Clearly define the units of analysis. Cases may be selected because they extend emergent theory or because they fill theoretical categories;
   c) Decide on the appropriate number of cases to explore within the study. Eisenhardt (1989) suggests limiting the number to the point where the incremental contribution of extra cases is only marginal;
   d) Clearly specifying the selection criteria for choosing the case studies;
   e) Choosing an appropriate and effective data collection and analysis strategy;
   f) Developing appropriate tests to ensure the validity and reliability of the approach taken in conducting the case study. Yin (1989, 1993) proposes four basic tests of logic that can be applied to assess the quality of a particular research design.

(3) Enrich the analysis with conclusions taken from (2)

4.2. Quantitative analysis

4.2.1. Description

Quantitative research methods were originally developed in the natural sciences to study natural phenomena. Examples of quantitative methods now well accepted in the social
sciences include survey methods, experiments, formal methods (e.g. econometrics) and numerical methods such as mathematical modeling (Myers, 1997).

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. Though this information is public, it is not available in a format that is easily extracted and ready to work with. Contacts were held with Kickstarter’s team to evaluate the possibility of having access to their database. Unfortunately, our request was not fulfilled. So, to overcome this barrier, instead of manually collecting every desired field since it was humanly impossible, we built an application to gather them automatically from the website, in a database format. The data was collected through scraping with individual verification, on March 1, 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 (4) short description (5) 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 made by funders (13) number of updates made by entrepreneurs (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 global holistic overview of our data base, from which some curious statistics can be withdrawn. We find that, for instance, the total crowd funded capital in Kickstarter, during the whole sample (2,75 years) is of around 128 million dollars, corresponding to 1,745,025 contributions, with the average of $81.42 per contribution. To this effect, if Kickstarter gets a 5% commission of all pledged contributions, consequently they earned almost 6.5 million dollars. The single project with the highest value pledged is Elevation Dock: The Best Dock For iPhone, which rose 1,464,706 dollars, while the project with more backers was The Order of the

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26 Website: http://www.kickstarter.com/discover/successful?ref=more
27 Format dd-mm-yyyy
28 Financing Rate = capital pledged in dollars / goal in dollars; projects where FR is over 1.
29 To validate all previous information
30 Different contributions include repeated backers
Stick Reprint Drive\textsuperscript{32}, with 14,952 different backers. The same project counts also with the highest number of comments, 17,683. Bicycle Portraits - everyday South Africans and their bicycles - A photographic book\textsuperscript{33} was the project with the highest number profile updates: 139. We find a tie among the project with the higher number of levels of rewards, where two projects offer 76 different alternatives to choose\textsuperscript{34}.

We also find that in the top twenty list of total pledged value, eight of them were already funded in the year 2012, ten were funded in 2011, and the remaining two were financed in late 2010, representing the increasing performance of the platform. Most of the campaigns on this list are in design and technology categories. Our data supports the evidence that categories with best performance are design, with average of 29.263 dollars captured per initiative; technology, with average of 28.101 dollars per initiative; and games, with average of 11.494 dollars per initiative. Furthermore, evidence for the first two months of this year only point out that 2.196 projects have been launched in this website, corresponding to an average of 36.6 per day.

Since March, 2011, that average number of financed projects by month stabilized between the 1.000 and 1.200. The best month was August, 2011 with 1.236 observations. Among our sample, constituted only by financed projects, we find that the average goal set by creators is of 5.000 dollars, and the average value collected is of 6.963.29 dollars. In average, 95 backers contribute to the success of a campaign.

We discover that only 631 campaigns were funded below the 500 dollars barrier, corresponding to 3.42\% of the total. 58.47\% though, collected between 500 dollars and 5.000 dollars. 21.02\% projects got financed from 10.000 dollars and 50.000 dollars interval, while 226 projects (1.21\%) collected higher amounts.

With the development of this analysis, Figure 5, Figure 6 and Figure 7 from Appendix 1; and Table 1 and Table 2 from Appendix 2 were produced.

\textsuperscript{32} http://www.kickstarter.com/projects/599092525/the-order-of-the-stick-reprint-drive
\textsuperscript{33} http://www.kickstarter.com/projects/bicycleportraits/bicycle-portraits-everyday-south-africans-and-their/posts
After this introduction, we proceed to 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) state, (17) country and (18) name of the entrepreneur. 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 March 2011, remaining stable until February 2012, as shown in Figure 5, Appendix 1 – . This means that this online platform reached maturity in this period, representing a subsample of 12,203 observations.

The fact that information is 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) number of comments and (13) number of updates, as they are dynamic, they have the possibility to increase after March 1, 2012. Projects are financed at different dates, and after of their completion there is still the possibility for the entrepreneurs to update their status, and for funders to comment them. This time effect is minimized by the subsample chosen, which considers initiatives with closer dates (April 2011 and February 2012). 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 remind that our core goal is to understand success in crowdfunding platforms. To do so, we must first explain what it is. There are two perspectives by which we can look at it. According to Earl Nightingale’s popular concept, “success is the progressive realization of a worthy goal or ideal”. This vision of success as the achievement of a pre-determined objective is consistent with our data, for the reason that it is only constituted by projects who reach the goal set by the entrepreneur before entering the crowdfunding process. We decide to use the (7) financing rate ratio as a proxy for success, as it seems to be the more appropriated dependent variable, considering success as the situation where overcoming initial expectations is achieved. Our sample is only constituted by financed projects: therefore, our dependent variable is always greater or equal to 100%. The other perspective to look at success is by contrasting it with failure, which is also acquainted to in qualitative analysis.
Furthermore, we assess which variables are statistically significant in predicting the (7) financing rate. Explicative variables include dummies accounting for (10) category, (8) number of backers, (12) number of comments, (13) number of updates, (14) number of levels of reward and (19) number of other projects backed by the entrepreneur. We use ordinary least squares (OLS) and 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.

4.2.2. Results

The statistical analysis results are the prove that Kickstarter, and therefore crowdfunding, are not only models that work in the theory. If this platform is able to successfully finance 18,430 different projects from the crowd, it is evident that something relevant is emerging from these interactions. It is, then, no surprise that crowdfunding is receiving renewed attention from online communities, social media and research studies. Crowdfunding is clearly gaining dimension. These statistical results are performed to understand some of the general characteristics that this phenomenon is gaining.

We find that the number of financed projects and total capital collected in Kickstarter has been growing exponentially over the time, as Figure 5 and Figure 6 show. It is coherent with the evidence that most successful projects are being funded as the time factor advances. Though we see that through time there are more projects collecting higher amounts of money, more than 60% of them raised less than 5,000 dollars, supporting the popular believe that crowdfunding is more effective for funding small and medium dimensioned causes. Furthermore, we also discover that projects with more return are in the categories of design, technology and games.

Concerning the econometrical analysis, results differ if we consider only the last year (the stable subsample) or the entire period. In the last case, significant variables are the (8) number of backers, (12) number of comments, (14) number of levels of reward, (19) number of other projects backed by the entrepreneur and if the project belongs to design, games, film & videos or technology categories. In the first case, two more
variables are included: (13) number of updates and the art category. Nevertheless, conclusions are similar in both cases: a positive relationship is found between success and (8) number of backers, (19) number of other projects backed by the entrepreneur and the categories design, games and technology; a negative relationship of (7) financing rate and the (12) number of comments, (14) number of level of reward and the category film & videos. In the first case, we also discover that the art category and (13) number of updates influence the success positively.

We use OLS to estimate the "best fit" of a set of independent variables such as (8) number of backers (12) number of comments (13) number of updates (14) number of levels of reward and (19) number of other projects backed by the entrepreneur, and dummies accounting for (10) project category against the dependent variable we wish to explain or predict: (7) the financing rate. 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: linearity in its parameters; residuals are homoscedastic and uncorrelated with independent variables and with one another over time; the data is derived from a normally distributed population.

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 correlates 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 (8) number of backers, (12) number of comments, (13) number of updates, (14) number of levels of reward, (19) number of other projects backed by the entrepreneur 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) number of backers, (13) number of updates, (19) number of other projects backed by the entrepreneur, and the categories design, art, games and technology; a negative relationship of (7) financing rate and (12) number of comments, (14) number of levels of reward, and the category film & videos.

We understand that this suggests 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.

4.3. Qualitative analysis

4.3.1. Description

If there is one thing which distinguishes humans from the natural world, it is our ability to talk (Myers, 1997). Qualitative research methods are designed to help researchers understand people and the social and cultural contexts within which they live, and involve the use of qualitative data, such as interviews, documents, and participant observation data, to understand and explain social phenomena (Myers, 1997). The usefulness of qualitative methodology is magnified when the research objective is to achieve deeper understanding of a novel phenomenon, the concepts and contexts pertaining to which are ill-defined because of a lack of previous theory (Eisenhardt, 1989). To ensure the variety of perspectives we organized our qualitative data collection from a variety of data sources, following Yin (2003b).

After the completion of the previous section, we are able to select some of the financed projects for a qualitative multi case-based analysis, considering projects’ intrinsic characteristics such as type, diversity and dimension. Complete information about them is easily collected over their Kickstarter’s page through their videos and descriptions, and complementary information can also be found through the internet. For each initiative, we perform a simple bibliometric search to measure the buzz generated by each individual project over the internet, resulting in Table 4. This is done so that we can figure how many pages over the internet mention the project, at a certain time. This technique is employed as an indicator of popularity of the project, and is utilized as an indicator of effectiveness of the marketing of the project. Different search engines are
tested for a higher reliability of data. However, this indicator is not strong enough if only used by itself, given that projects are completed at different times.

In this part we follow the methodological principle of exhaustion to find information that is not possible to reveal within the econometric data, until the new project does not add new information towards the previous. For a better understanding of the phenomenon, we also perform a survey about six projects chosen from the previous subsample, built online using Google Docs tool. The detail and constitution of our survey is available in the appendix. The purpose of this survey is to assess the quality of the elements of six projects of our subsample, made available in English and Portuguese languages.

The first section starts by asking personal information about the respondent, and its relation with crowdfunding. The survey follows with questions about each project selected, including a mixed of closed and open questions to ensure that the respondents are free to interpret the questions from their own perspectives (Yin, 2003b). In view of the fact that we are dealing with perceptions and behaviors towards this occurrence, we introduce a quantitative indicator to carry out additional qualitative conclusions, represented by a grid with a Likert psychometric scale (1-5) for acknowledging the level of agreement or disagreement facing different natured inputs (Likert, 1932), representing the perception that an expert gets after knowing the project. This grid is the same concerning different projects, for a superior comparison between them. The results are utilized to build an individual graph for each project, in the form of a histogram completed with the means, standard deviation and number of observations. To assess the projects, the particular Kickstarter’s page link is given to the respondent. Through the reading of the description, watching of video and observance at the statistics, one is able to formulate its mindset to fulfill the answers.

Given that most people are not familiar with the crowdfunding concept, we direct our enquiry to specific people addressed as expertise board. These are specialists who are somehow linked to this matter, including investors, entrepreneurs, platform members or related professionals in fundraising activities. The form was delivered to several

35 Link to the survey: [https://docs.google.com/spreadsheet/viewform?formkey=dDg5YU12aEhsS0ZSMGRtMXEyebm5vbGc6MQ](https://docs.google.com/spreadsheet/viewform?formkey=dDg5YU12aEhsS0ZSMGRtMXEyebm5vbGc6MQ)
recipients in which can be found innumerous *crowdfunding* platforms, online forums of the area and to professionals who work in the field of fundraising and/or entrepreneurship. Despite our thought that this way we would get a high number of answers, at the end we got at least one answer from each specialist category. Answers came from all around the world, resulting in six complete valid opinions.

Besides, we find that the ideal number of projects to include in the survey is six, since it achieves the best trade-off between the optimal interest for the research and the reasonable time to fill in the questionnaire. We estimate that each project takes about five to six minutes to evaluate, so this would take around 35 minutes. Although we find that not everyone is disposed to spend so much time completing surveys, we assume that respondents connected to this issue would be more predispose to perform it. We also offered the divulgation of our final results as a counterpart for the help. The selection of the projects was made not only to fulfill the methodological requirements of the research but also to raise the maximum interest of the respondent.

The projects selected are: (1) Tephra: the Steampunk RPG\(^{36}\) (2) Elevation Dock: The Best Dock For iPhone\(^{37}\) (3) The Kids on the Street: Season Two!\(^{38}\) (4) Pen Type-A : A minimal pen\(^{39}\) (5) COLOR ME OBSESSED, a film about The Replacements (phase 7)\(^{40}\) and (6) Printrbot: Your First 3D Printer\(^{41}\).

As said before, our explicative variable is the financing rate ratio, and our selection is made based on this instrument. 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 elected because it has the highest financing rate in the films & video, 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


\(^{39}\) Project 4 link: [http://www.kickstarter.com/projects/cwandt/pen-type-a-a-minimal-pen](http://www.kickstarter.com/projects/cwandt/pen-type-a-a-minimal-pen)


\(^{41}\) Project 6 link: [http://www.kickstarter.com/projects/printrbot/printrbot-your-first-3d-printer](http://www.kickstarter.com/projects/printrbot/printrbot-your-first-3d-printer)
sheep, because in our sample, it is the closest one 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. We assume that projects where the value pledged is equal or slightly above its objective have more propensity to include contributions that were just given to help the project to achieve its goal. This group may include projects that were financed because they were close to their objective and needed a little push, and not because of the intrinsic interest of the campaign, to the extent that real success occurs when investors contribute because they really want the counterpart that is given. This one is selected in films & video category (category with worse performance) and got precisely 100% of financing rate. We find a several number of projects in this situation so, after having used 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 number 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, with the impressive 1,464,706 dollars collected.

So, this method gives us the possibility for understanding how to succeed in crowdfunding platforms. We try to collect powerful insight from people who are close to this matter, and participate in it. Appendix 3 shows how our questionnaire is structured. Along with the presentation of each project we try to identify other variables affecting the success of financing, which cannot be tested within an econometric framework. In this part, we are particularly interested in understanding the organization of the business model, the marketing strategy for raising money and in the role played by the entrepreneur. We analyze if there is any innovative storytelling presented in each project and how entrepreneurs advertise the initiative on the internet. This content is submitted to a data analysis which is the process of bringing order, structure and meaning to the mass of collected data (Marshal & Rossman, 1999). 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.
4.3.2. Case-studies

**P1 - Tephra: the Steampunk RPG**

Tephra is a role playing game developed by Cracked Monologue. The game was being tested since two years before the Kickstarter campaign, and creators saw that it was the right moment and opportunity for the final release. 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 part of the game developers or 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 help from 374 different contributors. This money allowed the project to order around 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 normally open-minded and is willing to spend more”, while a fundraiser defends that “the rewards from above from 70 dollars 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”.

Unlikely other ones, there is the particularity that no video is available at the page of this project, but that did not stop it from being one of the greatest hits within our sample. This project got an average of 3,39 values out of five in evaluation Likert scale chart, as the histogram represented in Figure 8 shows.
Casey Hopkins developed the Elevation Dock as an accessory for the famous high-end 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 being 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 is a clear incentive for buying during the campaign. 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 concern to show the human character of the entrepreneur”. This project got an average of 4.38 values out of five in evaluation Likert scale chart, as the histogram represented in Figure 9 shows.
**P3 - The Kids on the Street: Season Two!**

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 with the aim of purchasing 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”. Almost everyone inquired says that does not identify with the project. This project got an average of 3.21 values out of five in evaluation Likert scale chart, as the histogram represented in Figure 10 shows. We remember that this initiative was selected as our worst successful out of the better succeeded, and curiously it is not the one with the lowest score given by respondents.

**P4 - Pen Type-A : A minimal pen**

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 level, and the one who would not invest recon 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 rewards could appeal better to a higher investment, as there is no discount for quantity, and that rewards for those who wanted to invest less were not appealing. However, the product is interesting, a good design and an ecological component”. Note that, again, the pressure to buy is increased at the point where is stated that for 50 dollars one could get a product that would later retail for 99 dollars.
This project got an average of 4,1 values out of five in evaluation Likert scale chart, as the histogram represented in Figure 11 shows.

**P5 - COLOR ME OBSESSED, a film about The Replacements (phase 7)**

Like project 3, this is also a project in film & video category. It is, though, a short movie that claims to tell 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”. Curiously, one cannot find any more concrete information about the project. In the video one can only see the participating producers sequentially speaking their own name.

It is the project with the higher financing rate in this 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 (the film only, no extras), along with a special thank you email from the film's director”. They also collected a single contribution of 500 dollars, another of 1000 dollars, and another one of 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.

This is the second project in the films & movies visited in this analysis. In quantitative analysis we observe that this category is the one that holds negative relationship with financing rate. To the same effect of Project 3, 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 way, 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”. This project got an average of 3,01 values out of five in evaluation Likert scale chart, as the histogram represented in
Figure 12 shows. The best succeeded project of this category in our sample got the lowest grade out of the six case-studies.

**P6 - Printrbot: Your First 3D Printer**

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”, while others “will take you many more hours to build, they will also have hundreds more parts, and they will cost more”. The machine has also the particularity that it is a RepRap, which “means that you will immediately be able to upgrade and modify the machine with parts you print yourself”. 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 1.808 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 “the technology should be offered to a large manufacturing company to use the product, as there is a market for this product”. Another investor states that “in a global perspective, the project is very realistic in the communication and in the goal and reward fields”. This project got the best performance among our respondents, with an average of 4,21 values out of five in evaluation Likert scale chart, as the histogram represented in Figure 13 shows.

**4.3.3. Results**

Crowdfunding is the best option for start-ups that can communicate their value proposition with no trouble and have a strong consumer focus, as the appeal is directly made to this agent. The case-studies show 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 an audience who is passionate and loyal. The creative and innovative component of the campaign is indispensable to achieve that preposition.
Rewards have a crucial importance in the process, since they are normally the main motivation that moves people to invest in certain project. We find that most of successful projects offer tangible rewards in exchange for contribution, and our sample is consistent with that view. In projects 1, 2, 4, 5 and 6 (the most successful) one can find a physical product offered as reward, including project 5 (short film), which most pledged level offered the copy of the final DVD version of the movie. Besides the tangibility component, as a platform manager highlights, the rewards “are essential to appeal to the purchase. The price should be lower than the price of the final product in the market, or they must be unique”. It is clear in project 2, 4 and 6 that the price of the item during the Kickstarter campaign is significantly lower than the price that is later retailing. This marketing trick triggers to the mind of the consumer the urge to buy that product as soon as possible, and that may be helpful to attract fans in these campaigns.

Another strategy is to offer limited or special editions to the crowdfunding purchasers. For instance, the project 2 makes available a “special LimeGreen or SunOrange anodized Elevation Dock+ with lasered serial numbers. These beautiful finishes subtly change color at different angles and are exclusive only to Kickstarter backers in this limited run”. Moreover, a different platform manager evidences that “the product or service should be useful for the crowd”, while an entrepreneur adds that rewards “should be thought in quantity, quality and adaptability to any interested public”. An investor summarizes that “the entrepreneur must have a good product”, and considers the “design” as the most important characteristic that makes him pledge to certain product. Moreover, showing a prototype or illustrating the technical characteristics of the product increases the chances of being funded, as observed in projects 2, 4 and 6.

On the contrary, project 5 opts strategically not to show images from their movie, to raise investors’ curiosity towards the project, regarding that the characteristics of the project allows them to do it. One should offer interesting rewards and value to higher levels of reward. An investor points out that “gadgets tend to attract a strong number of investors, because these rewards can be more appealing to the crowd and a direct benefit for the investor is shown”. This statement is consistent with quantitative results that show that design, technology and games are categories with best performance, which means that a project in these categories have more return in average than others, and these are somehow related to some kind of gadgets. The most appealing campaigns
normally show some technology innovations and connections with succeeded branded products, such as project 2, 4 and 6.

Previous elements show without any doubt that one should invest in the planning of the project, before showing it to the world. From that point where information becomes public, there is no way back. Some improvements can be made and may emerge from direct relation with the consumer, but the preparation must be well thought out previously. The entrepreneur should make sure that the selected goal is sufficient to cover for the production with profit and a margin for unpredicted events by measuring, for instance, how many supporters he needs to reach, and how many rewards he has to fulfill to achieve the objectives. One should keep in mind that some rewards may be hard to distribute. Some campaigns make use of the website’s tool to limit the number of possible selections for every level of reward. As an example, among others of our sample, project 6 gave a reward for 999 dollars available only to the first ten contributors, which included a “fully assembled and calibrated Printrbot in a Birch lasercut enclosure box - hand painted by an award winning hotrod painter”. At the end of the deadline, when project succeeds, the rewards must be delivered, as the main obligation that the entrepreneur must fulfill. To do that, fair goals should be set according to the dimension of the market. The product should be thought to bring value to customers, and prepared to compete in the markets by itself. A project should explain why it is important or different from everything else in the marketplace and why prospective supporters should get behind it. One can find that some analyzed projects show the benefits of the product, and that is a thing Project 2, for instance, does very well, by demonstrating in which circumstances their Elevation Dock could be used for.

We also find that the enrollment of the consumers is extremely important for success. At this extent, communication has crucial influence, which is performed by the video, by the text description of the initiative, and by the updates. A platform manager believes that the video has crucial influence on the success, as it “is the main tool for describing the project”. It should not only be “appealing, fun, interesting and easy to understand”, but also has to be “short so that supporters see it until the end”, and adds that “it has to show the entrepreneurs face to create a personal connection and trust”. According to the same font, the other communication vehicle, the text description, “has to be very
explanatory, without being too long or technical. One can include files that may be useful to supplement the description”. It should be clear about the budgeting, where “it should be explained for greater transparency, and be realistic and not too ambitious” An investor reinforces that “communication should be clear and incisive”. An entrepreneur highlights that the project “must be well communicated previously, during and after the crowdfunding campaign”. A different investor affirms that “a good pitch will always be an asset to the investor. If the message is transferred in a direct and sustained way, it raises the investor’s desire to be part of the project”. This enrollment of the consumer is easier to achieve in crowdfunding projects, as it is easy to understand that the experience of the consumer differs if the purchases, for instance, an Elevation Dock in the Kickstarter campaign or if he goes to buy the same product in a local store. In crowdfunding it is usual that backers gain emotional attachments to the success or failure of the campaign, as if they were dealing with their own success or failure. The fact that entrepreneurs are able to show their face, provide access to their biography and explain pitch directly their agenda to the public is a clear advantage in crowdfunding models.

A good product, a well built description and a video that describes the project, explaining clearly how things are going to be made is half-way to success, but that is not enough. To collect money from the crowd, the crowd must be aware of what is going on, and for that to happen the initiative must be publicized. The idea is to reach the most number of people as possible. A platform manager evidences that “advertisement is the most important part” of the process and argues that “the entrepreneur should not rest until the deadline is closed, since the success will only depend on him”. To do so “he should start with his closer circles of family and friends, and then attract the remaining backers, because they do not want to support a project that is not getting fans”. The social networks and social media play an important role in to this effect, because it permits an instant propagation of the message. Usually, backers publicize the projects they believe through their own networks. The effect can be, in some cases, exponential. An investor highlights that “social media are extremely important in the promotion of the project, because they have the potential to reach a global audience, and generate a "buzz" without any limits”. Table 4 refers to the number of results that the name of the project got in different search engines, and supports
undoubtedly this argument, being the most succeeded projects the ones with more backers. However, this is not enough. A platform manager affirms that “to thank the supporters and update them often is also paramount”. We note that it is not rare that, after funding, entrepreneurs keep in touch with the backers, sharing constant updates about the status of the production process, curiosities, shipping dates of rewards and even thank you notes. The *crowdfunding* process does not end at the moment of completion or not of funding: it is just the start of an entrepreneurial journey. Summarizing, it is important to spread the word, and to get to the most people as possible, advertize through friends, family, social networks, journals, online forums related to campaign’s activity and others. It is vital for the project to be noticed.

Generally, *crowdfunding* is best suited for ideas that are not very expensive. Though in our case-studies we analyze projects with impressive amounts of funds raised, one should keep in mind these are the most successful among many. Those do not occur every day. In our whole sample, there were 18,430 financed projects, and the average pledged amount among them is of around 7,000 dollars. So, it is more likely that a project succeeds if their goals are near this landmark. Besides, given the non-linear nature of *crowdfunding*, one should keep in mind that each *crowdfunding* campaign differs from another, it varies according to the platform chosen, and it would definitely be different if the same campaign were posted in different times of the year. It is impossible to predict with certainty what is going to happen after entering in this process. To end our findings in this section, we agree with a platform manager that summarizes his contribution defending that all of this “takes a lot of spirit”.

### 4.4. Insights for further research

This dissertation has some limitations that should be referred to. Among these is the fact that we study a specific type of *crowdfunding*, the one that is applied in Kickstarter, which contemplates a reward-based model. There are, as mentioned before, other possible approaches to the concept. In fact, every different platform interprets and implements it in different ways according to its aim, specialty, public, and different kinds of projects. Still, although most of the results presented by this study are presumably applicable to other models, some others may differ.
In other perspective, *crowdfunding* platforms have specific publics, and adapt to cultural, social and economical conditions. In truth, that is a restriction to that we face in this study, since we focus our analysis on a single platform, which is growing in the particular culture and society of the United States of America. It is important to caveat that these differences go to a deeper level of abstraction, considering that the mindset of the people can be inherently more entrepreneurial in this than in most countries, and are consequently more open to adopt new tools.

Though we are able to understand some of the dynamics of the projects during its timeline, our sample is only constituted by final and static information about the campaigns. To minimize the lack of this kind of information, we develop a qualitative analysis of a range of financed projects, but it would also be interesting to have access to dynamic input indicators for a better understanding of the various phases in the life cycle of the *crowdfunding* financing cycle. We think that there is a lot of potential in this data, since it would help a broader understanding of the complexity in this process.

We are also conscientious that there is still a lot of research to be performed concerning this issue. For instance, equity-based *crowdfunding* is not yet duly tested in this paper neither in reality. It is a model that is in an early phase of its life cycle and a lot will be experienced and talked about. We believe that related activities will rise in the beginning of year 2013, gathering attention to new types of projects, and providing new and unexpected scenarios.

One should look at this research as a Kickstarter case-study, which provides us understanding of the relevance that this models can have in the near future in modern fundraising activities. Though we have a high degree of confidence in our findings, we reinforce that one should always look at success as a non-linear and complex event. The guidelines presented in this study do not warrant success, but they certainly raise its probabilities.
5. Conclusions

We start this dissertation by performing a literature review about *crowdfunding*, where we set a framework for this concept in the context of innovation and organizational network theory. Then, we continue our research by developing a taxonomy for this phenomenon based on the type of reward that motivates the investment from the crowd. In this classification, we find and provide comprehension about five components inherent to its nature: donation-based, lending-based, equity-based, reward-based and hybrid-based *crowdfunding*. Furthermore, we examine information gathered from Kickstarter, the largest *crowdfunding* platform existing to date which impersonates a reward-based platform. Our sample corresponds to 18,430 observations about successfully launched projects in this website, and our aim is to offer comprehension about the critical factors for a project to succeed in these platforms. To this extent, we develop a mixed quantitative and qualitative methodology for a better understanding of the phenomenon. First, a quantitative methodology is applied to the collected data in a top-down macro-to-micro approach, in the view of the fact that data is treated as a cluster and results are aggregated as a whole. Then, to understand what previous analysis cannot explain, a qualitative multi case-study approach is made, in a bottom-up micro-to-macro logic, by the realization of case-studies of six projects selected through the quantitative results. The case studies are supported on the opinion of experts that were asked to fill a survey to assess the initiatives according to their own perceptions about each project. We understand that this is the best method to address this issue, because those methods combined provide better information than only by themselves, ensuring higher quality and reliability of results.

From the statistical analysis, we find that most projects that collect more money are in the design, technology and games categories. However, music and films & video are the ones with higher number of financed projects. Though we have in our sample projects with more than 1 million of dollars collected, we underline that more than 60% of the financed projects collected less than 5,000 dollars. Results extracted from the econometrical analysis suggest that to succeed it is important to involve backers and raise their number; to design a simple rewards system with lower number of levels of rewards; 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, and provide some useful statistics from our data.

The case-studies analysis provides more practical considerations that an entrepreneur should have to raise the probability of being successful in these platforms. 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. It is more likely to occur when tangible and interesting rewards are offered in exchange for collaboration, as proved by most successful projects and selected levels of contribution. We find that the enrollment of the consumers is extremely important and that, 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.

This research shows that crowdfunding and Kickstarter are a serious alternative for funding entrepreneurial projects. Still, records are being beaten every day. While we were working on this research, other striking projects came up, such as “Double Fine Adventure”\(^{42}\), an adventure video game project which collected over 3.3 million dollars at March 13. Tim Schafer, funder of this project, affirms that he “raised three times that the higher limit of JOBS act giving away lunches and t-shirts,” and states that the fact of "people taking chunks of our equity is something we are trying to get away from.” (Pender, 2012). Two months later, “Pebble: E-Paper Watch for iPhone and Android”\(^{43}\), a product designed watch with special characteristics of connectivity with a broad range of smartphones, exceeded the 10 million dollars landmark in only 37 days from 68,929 backers. In this project, from day one investors commented its page suggesting desired improvements to the product. This interaction permitted the watch to gain, for example, water-resistant and Bluetooth 4.0 capabilities, which unlikely would occur in other financing models. These changes resulted in an enhanced final product produced with the insight of final consumer. These examples make us perceive that it is not just about

\(^{42}\) Project Link: [http://www.kickstarter.com/projects/66710809/double-fine-adventure](http://www.kickstarter.com/projects/66710809/double-fine-adventure)

the potential of this tool anymore: this funding tool proves undoubtedly its capabilities that emerge everyday from rhizomatic structures.

To this effect, we understand that crowdfunding can be the revolution we need. One strong pro argument towards this instrument is its entrepreneurial nature. *Crowdfunding*, makes it easier for creators, and can therefore help to tackle unemployment as it supports auto-employment by empowering unemployed people to use their capabilities. There is room for projects that otherwise would never see the daylight. Its unequivocal performance in the creation of small ventures and small initiatives is working towards the decentralization of the economies, which goes against the running evidence of constant growth of medium and high dimensioned companies. From another point of view, an approximation between demand and supply is observed when using *crowdfunding*. Initiatives are funded because they somehow are giving the market what people want. Moreover, it brings the capacity to test the market by giving visibility to ideas before investment, promotes of the image of the brand and the creation of a fan base before its constitution with low agency costs without any extra costs of market research. If the project does not succeed at this stage, there are no high sunk costs, and therefore the risk is low. It is, then, an intelligent way to apply resources, since every dollar is affected by an independent mechanism. This is changing the present and it is a game change for the near future. Still, many projects do not achieve their funding goals. Failure is still a part of the process, and it is not necessarily bad. It means that the business needs to be adapted or rethought. It is better to fail at this time compared to situations when real money is invested. Moreover, it would be expected that, in the middle of thousands of causes, there would be some situations where fraud would occur. Fortunately, until now, we could not find a single example of misuse of the capital pledged through *crowdfunding*.

In addition, our perception is that most of people still do not know what *crowdfunding* is about. This is curious because the crowd is constituted by people, and if they don't know what it is, there is no *crowdfunding*. We find, though, that people are gradually getting aware of this trend, giving it more strength as a valid funding tool for the future, transforming the world in a place where people agree to “lend” each other directly.
6. References


7. Appendix

Appendix 1 – Figures

Figure 1 - Characterization of the crowdfunding process

1. Entrepreneur conceives a business idea and decides to implement it.

2. The crowdfunding platform is selected according to the nature and the goals of the initiative.

3. A video and a description of the project are built; the deadlines, rewards and financial goals are defined. Information is submitted to the platform.

4. If requirements are met, project is accepted in the platform, and is made available to the crowd. Entrepreneur advertizes the initiative through his circles.

5. During this timeline, contributions are accepted for each level of reward.

6. At the end of the deadline, project may reach, exceed or fall below its financial goals. If it fails, the amount collected never leaves the investors’ account. There are no limits for amounts collected.

7. If successful, initiative is implemented according to the description.

8. After the previous, rewards are produced and distributed, and in many cases the venture proceeds with activity.

Source: Own production
Figure 2 - Active crowdfunding platforms over the world

MORE THAN 450 CFPs ARE ACTIVE WORLDWIDE: THE MAJORITY BASED IN NORTH AMERICA AND EUROPE

NUMBER OF CFPs, 2012

Source: Massolution (2012)

Figure 3 – Taxonomy of crowdfunding

Source: Own production
Figure 4 – Kickstarter’s random project page

Source: Kickstarter (2012)

Figure 5 - Number of financed projects on Kickstarter per month over the time

Source: Own production
Figure 6 - Amount of total capital pledged per month over the time

Amount of capital pledged per month over the time

Source: Own production

Figure 7 - Average return per project category in Kickstarter

Source: Own production
Figure 8 - Histogram Project 1

Source: Own production

Figure 9 - Histogram Project 2

Source: Own production
Figure 10 - Histogram Project 3

Source: Own production

Figure 11 - Histogram Project 4

Source: Own production
Figure 12 - Histogram Project 5

Source: Own production

Figure 13 - Histogram Project 6

Source: Own production
Appendix 2 – Tables

Table 1 - Total funding per category and number of projects

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount pledged</th>
<th>%</th>
<th>Number of projects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>$ 7,551,031.00</td>
<td>6%</td>
<td>1749</td>
<td>9%</td>
</tr>
<tr>
<td>Comics</td>
<td>$ 3,576,117.84</td>
<td>3%</td>
<td>422</td>
<td>2%</td>
</tr>
<tr>
<td>Dance</td>
<td>$ 1,418,837.00</td>
<td>1%</td>
<td>428</td>
<td>2%</td>
</tr>
<tr>
<td>Design</td>
<td>$ 14,807,199.00</td>
<td>12%</td>
<td>506</td>
<td>3%</td>
</tr>
<tr>
<td>Fashion</td>
<td>$ 1,549,196.00</td>
<td>1%</td>
<td>260</td>
<td>1%</td>
</tr>
<tr>
<td>Film &amp; Video</td>
<td>$ 41,304,377.00</td>
<td>32%</td>
<td>5164</td>
<td>28%</td>
</tr>
<tr>
<td>Food</td>
<td>$ 3,852,034.00</td>
<td>3%</td>
<td>430</td>
<td>2%</td>
</tr>
<tr>
<td>Games</td>
<td>$ 4,655,087.00</td>
<td>4%</td>
<td>405</td>
<td>2%</td>
</tr>
<tr>
<td>Music</td>
<td>$ 28,405,638.12</td>
<td>22%</td>
<td>5578</td>
<td>30%</td>
</tr>
<tr>
<td>Photography</td>
<td>$ 2,798,028.00</td>
<td>2%</td>
<td>584</td>
<td>3%</td>
</tr>
<tr>
<td>Publishing</td>
<td>$ 6,349,992.00</td>
<td>5%</td>
<td>1249</td>
<td>7%</td>
</tr>
<tr>
<td>Technology</td>
<td>$ 6,491,232.00</td>
<td>5%</td>
<td>231</td>
<td>1%</td>
</tr>
<tr>
<td>Theater</td>
<td>$ 5,574,612.00</td>
<td>4%</td>
<td>1424</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>$ 128,333,380.96</td>
<td>100%</td>
<td>18430</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Own production

Table 2 - Number of projects financed at different levels

<table>
<thead>
<tr>
<th>Amount pledged</th>
<th>Number of projects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>x &lt; 500 dollars</td>
<td>631</td>
<td>3,42%</td>
</tr>
<tr>
<td>500 &lt; x &lt; 5,000 dollars</td>
<td>10776</td>
<td>58,47%</td>
</tr>
<tr>
<td>5,000 &lt; x &lt; 10,000 dollars</td>
<td>3874</td>
<td>21,02%</td>
</tr>
<tr>
<td>10,000 &lt; x &lt; 50,000 dollars</td>
<td>2923</td>
<td>15,86%</td>
</tr>
<tr>
<td>50,000 &lt; x &lt; 250,000 dollars</td>
<td>209</td>
<td>1,13%</td>
</tr>
<tr>
<td>250,000 &lt; x &lt; 1 million dollars</td>
<td>15</td>
<td>0,08%</td>
</tr>
<tr>
<td>x &gt; 1 million dollars</td>
<td>2</td>
<td>0,01%</td>
</tr>
<tr>
<td>Total</td>
<td>18430</td>
<td>100,00%</td>
</tr>
</tbody>
</table>

Source: Own production
Table 3 - OLS with stepwise regression results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>114,427</td>
<td>24,084</td>
<td>.000</td>
</tr>
<tr>
<td>Backers</td>
<td>.289</td>
<td>36,430</td>
<td>.000</td>
</tr>
<tr>
<td>Project category: Design</td>
<td>115,538</td>
<td>9,798</td>
<td>.000</td>
</tr>
<tr>
<td>Comments</td>
<td>-0.092</td>
<td>-6.490</td>
<td>.000</td>
</tr>
<tr>
<td>Project category: Games</td>
<td>45,910</td>
<td>3,562</td>
<td>.000</td>
</tr>
<tr>
<td>Entrepreneur backed</td>
<td>1,090</td>
<td>4,016</td>
<td>.000</td>
</tr>
<tr>
<td>Project category: Fims&amp;Video</td>
<td>-14,637</td>
<td>-3,288</td>
<td>.001</td>
</tr>
<tr>
<td>Levels of reward</td>
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<td>-3,629</td>
<td>.000</td>
</tr>
<tr>
<td>Project category: Technology</td>
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<td>2,857</td>
<td>.004</td>
</tr>
<tr>
<td>Updates</td>
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<td>2,494</td>
<td>.013</td>
</tr>
<tr>
<td>Project category: Art</td>
<td>13,770</td>
<td>2,069</td>
<td>.039</td>
</tr>
</tbody>
</table>

Source: Own production

Table 4 - Bibliometric search

<table>
<thead>
<tr>
<th></th>
<th>Project 1</th>
<th>Project 2</th>
<th>Project 3</th>
<th>Project 4</th>
<th>Project 5</th>
<th>Project 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of completion</td>
<td>5 Feb 12</td>
<td>11 Feb 12</td>
<td>4 Feb 12</td>
<td>15 Aug 11</td>
<td>20 May 11</td>
<td>17 Dec 11</td>
</tr>
<tr>
<td>Google</td>
<td>3.200</td>
<td>18.400</td>
<td>702</td>
<td>33.300</td>
<td>115</td>
<td>39.100</td>
</tr>
<tr>
<td>Yahoo</td>
<td>37</td>
<td>5.750</td>
<td>5</td>
<td>127</td>
<td>11</td>
<td>4.080</td>
</tr>
<tr>
<td>Bing</td>
<td>88</td>
<td>497</td>
<td>5</td>
<td>210</td>
<td>10</td>
<td>8.620</td>
</tr>
</tbody>
</table>

Source: Own production

44 This table that displays the number of results by the name of the project in search engine was built in April, 23 of 2012, at 18:20.
Appendix 3 – Survey

**Crowdfunding: critical factors of success**

We would like to ask for your cooperation by answering this survey as part of an investigation about the critical factors of success in crowdfunding. It will enable us to build a dissertation for the Master in the Economics and Management of Innovation at the Faculty of Economics of Porto, Portugal, developed by Pedro de Miranda Leite under the supervision of Prof. Doutor Nuno Moutinho.

Crowdfunding is a tool that is emerging as an alternative to traditional forms of financing such as bank loans, business angels, investment or venture capital, 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. Examples of the basis of crowdfunding can be, for instance, in form of lottery tickets or charity contributions. However, a recent internet-based approach, in the form of open call, provides new applications for this concept.

The purpose of this survey is to assess the quality of six projects funded at Kickstarter (US), the world’s largest crowdfunding platform. Given that most people are not familiar with this concept, we direct our enquiry to specialists who are somehow linked to this matter, including investors, entrepreneurs, platforms or related professionals. We stress that personal data may be kept anonymous and the results will be used for research purposes exclusively.

We emphasize that the filling of this form will help you to increase your knowledge about this phenomenon, which is gaining relevance worldwide, particularly in a crisis such as the one we are facing. The selection of the projects was made not only to fulfill the methodological requirements of the research but also to raise the maximum interest of the respondent.

To answer to the questionnaire, please visit the page of each project site, and evaluate each one of them by filling in the respective fields. All pages have a similar design, where you will find, among other information, a description, a video, the number of backers that supported the initiative, the goal set in dollars or the amount pledged in dollars. It will take you about 35 minutes.

**Project 1** - *Tephra: the Steampunk RPG*

**Project 2** - *Elevation Dock: The Best Dock For iPhone*

**Project 3** - *The Kids on the Street Season Two!*

**Project 4** - *Pen Type A: A minimal pen*

**Project 5** - *COLOR ME OBSESSED, a film about The Replacements (phase 7)*

**Project 6** - *Printbot: Your First 3D Printer*

Deadline: 21 May 2012

**PORTUGUESE VERSION**
[https://docs.google.com/spreadsheet/viewform?formkey=dDq5Y3Uz2aEhsYjQ5MG93M1xybHcmVjbGc6MQ](https://docs.google.com/spreadsheet/viewform?formkey=dDq5Y3Uz2aEhsYjQ5MG93M1xybHcmVjbGc6MQ)

Thank you for your cooperation.

Pedro de Miranda Leite
pedromirandaleite@gmail.com

*Obrigatório*
Personal Information

Name *

E-mail *

Occupation *

Organization *

Connection with crowdfunding *
- I'm an investor
- I'm an entrepreneur
- I'm related with a crowdfunding's platform
- I develop activities related with fundraising (banking, business angel, venture capital)
- Other: _____________________________

Confidentiality of personal data *
- I authorize the reference to my name / occupation / institution
- I only authorize the reference to my connection with crowdfunding

Would you like to receive the final results of this research via email? *
- Yes
- No

Project 1

Project 1 - Tephra: the Steampunk RPG *
Link: http://www.kickstarter.com/projects/257331192/tephra-the-steampunk-rpg

<table>
<thead>
<tr>
<th>Quality of the chosen name</th>
<th>Very bad</th>
<th>Bad</th>
<th>Indifferent</th>
<th>Good</th>
<th>Very good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality and content of the description</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of the communication of the project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of creativity and innovation of the project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of detail of the product, service and / or business model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective set realistically according to the potential market</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of detail in application of funds pledged</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attractiveness of the rewards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair value of the rewards</td>
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<td></td>
<td></td>
<td></td>
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Project 1 - Would you invest in this project? *
- Yes
- No

Project 1 - If so, how much (in $)? *
Enter the amount corresponding to the desired reward.

Project 1 - If not, why? *
Describe the reason why you would not invest in this project.

Project 1 - Comments (optional)
What were, in your opinion, the motives which led to the achievement of the financial goal of the project? What are their strengths and weaknesses? Add other information you consider relevant.

Project 2

Project 2 - Elevation Dock: The Best Dock for iPhone *

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Project 2 - Would you invest in this project? *

☐ Yes
☐ No

Project 2 - If so, how much (in $)? *
Enter the amount corresponding to the desired reward.

Project 2 - If not, why? *
Describe the reason why you would not invest in this project.

Project 2 - Comments (optional)
What were, in your opinion, the motives which led to the achievement of the financial goal of the project? What are their strengths and weaknesses? Add other information you consider relevant.

Project 3

Project 3 - The Kids on the Streets Season Two! *
Link: http://www.kickstarter.com/projects/glenwilliams/the-kids-on-the-streets-season-two

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</table>
Project 3 - Would you invest in this project?

- Yes
- No

Project 3 - If so, how much (in $)?
Enter the amount corresponding to the desired reward.

Project 3 - If not, why?
Describe the reason why you would not invest in this project.

Project 3 - Comments (optional)
What were, in your opinion, the motives which led to the achievement of the financial goal of the project? What are their strengths and weaknesses? Add other information you consider relevant.

Project 4
 Project 4 - Pen Type-A: A minimal pen
Link: http://www.kickstarter.com/projects/cowandtpen-type-a-minimal-pen

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Project 4 - Would you invest in this project? *

- Yes
- No

Project 4 - If so, how much (in $)? *
Enter the amount corresponding to the desired reward.

Project 4 - If not, why? *
Describe the reason why you would not invest in this project.

Project 4 - Comments (optional)
What were, in your opinion, the motives which led to the achievement of the financial goal of the project? What are their strengths and weaknesses? Add other information you consider relevant.

Project 5

Project 5 - COLOR ME OBSESSED, a film about The Replacements (phase 7) *

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Project 5 - Would you invest in this project? *

- Yes
- No

Project 5 - If so, how much (in $)? *
Enter the amount corresponding to the desired reward.

Project 5 - If not, why? *
Describe the reason why you would not invest in this project.

Project 5 - Comments (optional)
What were, in your opinion, the motives which led to the achievement of the financial goal of the project? What are their strengths and weaknesses? Add other information you consider relevant.

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Project 6

Project 6 - Printrbot: Your First 3D Printer *
Link: http://www.kickstarter.com/projects/printrbot/printrbot-your-first-3d-printer

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Project 6 - Would you invest in this project? *

- Yes
- No

Project 6 - If so, how much (in $)? *
Enter the amount corresponding to the desired reward.

Project 6 - If not, why? *
Describe the reason why you would not invest in this project.

Project 6 - Comments (optional)
What were, in your opinion, the reasons which led to the achievement of the financial goal of the project? What are their strengths and weaknesses? Add other information you consider relevant.

Endnotes

What do you think that are, in general, the critical factors for a project to succeed in a crowdfunding platform? *
Indicate the main concerns an entrepreneur should have to present its initiative on these platforms.

Additional Comments (optional)

Enviar