

# CRITICAL SUCCESS FACTORS IN CROWDFUNDING: THE CASE OF KICKSTARTER

NUNO MOUTINHO\* E PEDRO LEITE\*\*

## 1. INTRODUÇÃO

*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 & Laralde, 2010), regardless whether from bank loans or equity capital (Belleflamme, *et al*, 2011). In addition, due to current depression, the banks find it difficult 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.

---

\* University of Porto School of Economics and Business (FEP), Center for Economics and Finance at UP (CEF.UP), CETAC.MEDIA, [moutinho@fep.up.pt](mailto:moutinho@fep.up.pt)

\*\* University of Porto School of Economics and Business (FEP), [pedromirandaleite@gmail.com](mailto:pedromirandaleite@gmail.com)

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 entrepreneurship 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 allow 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 use 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. 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 Kickstarter<sup>1</sup>, Indiegogo<sup>2</sup> or RocketHub<sup>3</sup> for funding creative initiatives; Sellaband<sup>4</sup> or Mymajorcompany<sup>5</sup> for projects related with the music industry; Kiva<sup>6</sup> where people empower people in the Third World with a 25 dollar peer-to-peer loan; Chipin<sup>7</sup> where you can collect money; Appbackr<sup>8</sup> specific for mobile application conception or even 33needs<sup>9</sup> 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 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 work 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.

---

1- Link: <http://www.kickstarter.com/>

2- Link: <http://www.indiegogo.com/>

3- Link: <http://rockethub.com/>

4- Link: <https://www.sellaband.com/>

5- Link: <http://www.mymajorcompany.com/>

6- Link: <http://www.kiva.org/>

7- Link: <http://www.chipin.com/>

8- Link: <http://www.appbackr.com/>

9- Link: <http://ready.33needs.com/>

## 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<sup>10</sup>. Obama also rose around three quarters of billion dollars in a *crowd-funding* 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<sup>11</sup>, 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

---

10- Link: <http://www.whitehouse.gov/OpenForQuestions>

11- Link: <http://crowdsourcing.typepad.com/>

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 (Elliott, 1980). New industries are emerging and older ones struggle to adapt. *Crowdsourcing* is 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.

## 2.2. A Taxonomy of Crowdfunding

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, 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 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).

The definition of *crowdfunding* provided by Ordanini *et al* (2009) was later refined by Lambert and Schwiendbacher (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.

### **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, Fundrazr, 33needs, Lets, Preenchaestavida and many others impersonate this type of crowdfunding. The report concludes that donation-based model is the one that attracts 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.

### **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, 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.

### **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.

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 one’s 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 crowdfunders (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 of 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.

### **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. 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 1 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.

**Figure 1 – Print Screen of a Project Page**



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) 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, 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. Crowdfunding investors have the right for the first and/or special edition release of products/services pre-ordered. Some projects keep 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.

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.

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.

### **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.

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.

### 3. EMPIRICAL ANALYSIS

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

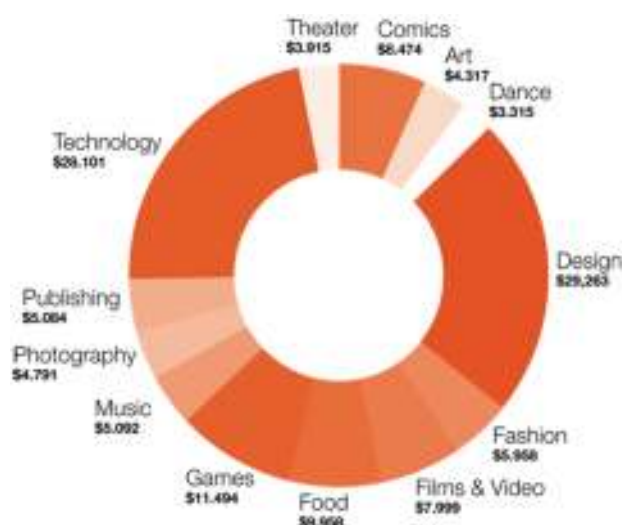
Regarding quantitative analysis, our sample is formed by projects financed in Kickstarter since May 3, 2009 until February 29, 2012, corresponding to 18.430 different observations. All successful projects can be found listed in the website. The database was collected through scraping from the website with individual verification, at 1 March 2012. For each of those

18.430 projects we captured the following information: (1) number of the project (2) name of the project (3) date (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 (13) number of updates (14) number of levels of reward (15) city (16) state (17) country (18) name of the entrepreneur (19) number of other projects backed by the entrepreneur (20) URL to the project.

Our quantitative analysis starts with a closer examination of our data. First, we observe that some projects exhibit very small amounts of

capital (less than 500 dollars) both asked and pledged. On the other hand, we find observations with missing values for some variables, namely fields (16), (17) and (18). After removal of all of these cases, we end up with 17.457 projects remaining for analysis. Then, we perform some stability tests to our data. In fact, we observe that the number of projects launched on Kickstarter grew exponentially between May 2009 and February 2011, remaining stable until February 2012<sup>12</sup>. This means that this online platform reached maturity in this period, representing a subsample of 12.203 observations. For our analysis, we consider only projects successfully financed from March 1, 2011 and February 29, 2012. In that period, the average return per project is very high.

**Figure 2 - Average return per project category in Kickstarter**



We remind that our core goal is to understand success in *crowdfunding* platforms. To do so, we decide to use the 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%.

We use ordinary least squares (OLS) to estimate the "best fit" of a set of independent variables such as (8) (12) (13) (14) and (19), and dummies accounting for project category) against the dependent variable we wish to

12- Numbers for 2011 are impressive: 11836 projects financed, representing a total of almost 100 million dollars pledged (<http://www.kickstarter.com/blog/2011-the-stats>).

explain or predict (7). The primary product of regression analysis is a linear equation which can be used to predict values of the dependent variable, given the values of the independent variables. This method is based upon a number of statistical assumptions such as: 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 rela-

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

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

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

The use of the stepwise method reveals that significant variables are (8), (12), (13), (14), (19), and if the project belongs to design, games, film & videos, technology or art catego-

ries. *Ceteris paribus*, we find a positive relationship between success and (8), (13), (19), and the categories design, art, games and technology; a negative relationship of (7) and (12), (14), and the category film&videos.

#### 4. QUALITATIVE ANALYSIS

After the completion of the previous section, we are able to select some of the projects for a qualitative multi case-based analysis. In this part we try to identify other variables affecting the success of financing, which cannot be tested within an econometric framework. The projects selected are: (1) Tephra: the Steampunk RPG<sup>13</sup> (2) Elevation Dock: The Best Dock For iPhone<sup>14</sup> (3) The Kids on the Street: Season Two!<sup>15</sup> (4) Pen Type-A: A minimal pen<sup>16</sup> (5) COLOR ME OBSESSED, a film about The Replacements (phase 7)<sup>17</sup> and (6) Printrbot: Your First 3D Printer<sup>18</sup>. Projects 1, 4 and 6 are the ones with higher financing rate within the categories that are positively related to success: games, design and technology respectively. Furthermore, project 5 is chosen because it has the highest financing rate in the films&videos, which is the category that holds a negative relationship with the same variable. This initiative stands out since it was the best succeeded in a difficult category. These receive special attention because they represent the essence of the variable that we are trying to explain: success. Project 3 is our black sheep, because it is the closest one in our sample that looks like failure, and helps us understand success by contrasting with it. Note that this project achieved its funding goal, so it cannot be considered as a pure failure. However, it certainly contrasts with projects with the highest financing rate ratio. This one is found in films&videos category, and got precisely 100% of financing rate. We

find a several number of projects in this situation so, after this filter, we elected randomly between the project with the lower capital pledged (500 dollars), considering an inferior value of goal as less capable of explaining success. We understand that project 2 should also be included in this part of the analysis, since it is by far the project with the higher amount pledged in our sample.

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

(1) Tephra is a role playing game developed by Cracked Monologue. The goal was set for a thousand dollars, in exchange for rewards that would function as instruments useful to play the game, including the respective rule book, a dice

---

13- Project 1 link: <http://www.kickstarter.com/projects/257331192/tephra-the-steampunk-rpg>

14- Project 2 link: <http://www.kickstarter.com/projects/hop/elevation-dock-the-best-dock-for-iphone>

15- Project 3 link: <http://www.kickstarter.com/projects/cglenwilliams/the-kids-on-the-street-season-two>

16- Project 4 link: <http://www.kickstarter.com/projects/cwandt/pen-type-a-a-minimal-pen>

17- Project 5 link: <http://www.kickstarter.com/projects/1542689813/color-me-obsessed-a-film-about-the-replacements-ph>

18- Project 6 link: <http://www.kickstarter.com/projects/printrbot/printrbot-your-first-3d-printer>



and/or a dice bag. Higher valued contributions included being integrated in 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 374 different contributors. This money allowed the project to order 2.000 numbers for the edition. Though only one out of six respondents would invest in this cause, the remaining five would not contribute just for the fact that they have no interest in the game. A platform manager stated that the reason for success is the fact that “they attacked an audience that is typically passionate for this hobby, which is typically open-minded and eager to spend more”, while a fundraiser defends that “rewards are well designed and fair, which makes sense for who wants to play the game”. According to the same inquired, the project “was in the direction of the needs identified in the market, revealing an effective market research”.

(2) Casey Hopkins developed the Elevation Dock as an accessory for the famous 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

perfect for standing along a stereo, video conference sessions, or even at as a bedroom charger. It is the campaign with the highest amount of funding for a single project in our sample. The landmark of 1.46 million dollars was achieved at February, 2012. The initial goal of 75 thousand dollars seems only a little crumb comparing to the total pledged value. For this project five out of the six respondents would buy this product, mainly for the 79 dollars level, which offers the Elevation Dock+, a better version of the dock. This reward, after the Kickstarter campaign will eventually retail for the price of 120 dollars, so there are clear advantages for buying at this moment. We also find curious the fact that to use the product one must be the owner of the referred equipment, and it shows that the success of this equipment can make the success of a well designed accessory. According to an investor in our sample, there is an evident preoccupation about the exposure of the information. There is “excellent communication, images, video and FAQ and the rewards are realistic and appropriate”. A contribution of another investor adds that “although the product is susceptible to be reproduced at an industrial scale, there is the preoccupation to show the human character of the entrepreneur”.

(3): This project is about the production of a web-series that “take pre-existing movies and we layer our own humor on top”. The goal of 500 dollars is set to buy a microphone for every participant in the show, and with it their own audio levels and tweaks”, and represents an improvement production quality for present and future series recording. It finished precisely with the same amount of money asked and received. Unfortunately, no one in our sample would buy a reward from this project. A platform manager states that “rewards are not attractive, however the goal was low and they

were probably able to convince friends and family to support the cause". An investor and a fundraiser have the same opinion that the "project is basic, but is realistic considering the goal".

(4): The Pen Type-A is a product design of "a stainless steel replacement for the Hi-Tec-C's cheap plastic housing", which are known for its thin tip and light touch. It is the project with the higher financing rate of its category, with almost 282 thousand dollars pledged, receiving approximately 113 times the pre-defined goal. Five out of our six respondents would invest in this project, all at the 50 dollars reward, and the one who would not invest admits that the contact with the project "makes you want to have the product", but "it is expensive". A platform manager has the opinion that the project is "well presented, and a personal connection with the entrepreneurs is made". The pressure to buy is increased at the point where is stated that for 50 dollars one could get a product that would later be sold for 99 dollars.

(5): This project is a short movie that tells a "true story of the most influential, always drunk, self-destructive, and yet frighteningly brilliant rock band of all time as told through the eyes of their fans, followers, and fellow musicians", including "love, hate, obsession, tears and vomit". It is the project with the higher financing rate in films&movies category, with 8.275 dollars out of 500 dollars asked. Most successful reward was at 42 dollars, and includes "a dvd screener of the films long before it's available commercially, along with a special than you email from the film's director". They also collected a single contribution for 500 dollars, other for 1000 dollars, and another one for 2500 dollars. Higher valued contributions offered "your name as a character", "the unedit-

ed interviews" or even a "small role with at least one line of dialog" in an upcoming movie. In quantitative analysis we observe that this category is the one that holds negative relationship with financing rate. To the same effect of P3, no one of our respondents would put his money in this project. A platform member is of the opinion that "at first, rewards do not seem sufficient and are quite expensive", and highlights the cost of the dvd. On the other hand, he states that "the video, however, is a good teaser for the supporters who want to know more about the project. And it seems that they managed to appeal to some fans of the band and some other sponsors. I think that the word-of-mouth was very important". This is consistent with the fact that almost half of total funding was collected by three single high valued contributions. A fundraiser reinforces that "the project is directed to a very small and specific crowd".

(6): The Printrbot is a 3D printer designed by Brook Drumm, to be "the 3D simplest printer yet". He states that, unlikely other printers available, "this all-in-one kit can be assembled and printing in couple of hours". Rewards offered different versions of the printer, and the most selected was the 499 dollars level where the "everything you need in one box to assemble a Printrbot Lasercut and start 3D printing". The entrepreneur asked for 25 thousand dollars and attracted 830 thousand from 1808 contributors. Two of our respondents would buy this equipment, even considering the high price to pay. According to a platform manager, "the possibility of having this object at home is attractive and seems to convince whoever has that financial capability". Furthermore, an investor thinks that "in a global perspective, the project is very realistic in the communication and in the goal and reward fields".

## 5. CONCLUSION

We examine information collected from projects in Kickstarter until February 29, 2012 for a better understanding of *crowdfunding* phenomenon and also to provide comprehension about the critical factors for a project to succeed in these platforms. In our sample, it is widely observed that a lot of initiatives are achieving their financial goals thanks to the contribution of rhizomatic networks and their ability to connect. The fact that there is interaction between entrepreneurs and investors, through comments and updates, makes *ex-ante crowdfunding* a system that allows multiple combinations between elements, which are dynamic and complex, with unlikely, unexpected and unpredictable results.

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, proving that *crowdfunding* is best suited for small venture projects. Results extracted from the econometrical analysis suggest that it is important for success to involve backers and raise their number; to design a simple rewards system with lower number of levels and finally to be an active entrepreneur within the platform, backing other projects. The analysis of case-studies based in experts' opinion reinforces the idea that success is better achieved when there is a possibility of reaching a large crowd of potential consumers or to a niche where one can find a passionate and loyal audience. Probabilities of succeeding rise when tangible and interesting rewards are offered in exchange for

collaboration, as proved by most wanted levels of contributions. We find that the enrollment of consumers is extremely important and, at this extent, communication has crucial influence. A project should explain why it is important or different from everything else in the marketplace and why prospective supporters should get behind it, and it should make good use of video and description tools. Showing a campaign where ideas are well structured and the technical characteristics of the product are in detail also increases the probabilities of funding.

This paper is primarily concerned with the role played by digital crowdfunding platforms in the process of communicating an entrepreneurial idea. *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. It has the potential to many things, including the lowering of the influence of the bank institutions for certain loans, transforming the world in a place where people agree to “lend” each other directly.



## REFERENCES

- Abraham, L., & Behrendt, C. (2010). *Oh my god what happened and what should i do?* New York: Innovative Thunder.
- Agrawal, A., Catalini, C., & Goldfarb, A. (2011). The Geography of Crowdfunding. *National Bureau of Economic Research* , Working Paper 16820.
- Amabile, T. M. (1996). *Creativity in Context*. Boulder, Colorado: Westview Press Inc.
- Arena, R., & Dangel-Hagnauer, C. (2002). *Joseph Shumpeter to economics: economic development and institutional change*. London and New York: Routledge.
- Bell, D. (1973). *The Coming of the Post-Industrial Society*. New York: Basic Books.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2010). Crowdfunding: An Industrial Organization Perspective. *Digital Business Models: Understanding Strategies* , Workshop.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2011). Crowdfunding: Tapping the Right Crowd. *International Conference of the French Finance Association (AFFI)* .
- Brabham, D. (2008). Crowdsourcing as a Model for Problem Solving. *Convergence: The International Journal of Research into New Media Technologies* , Vol. 14, pp. 75-90.
- Britannica Online Encyclopedia. (2012). *Rhizome*. Retrieved May 22, 2012, from Britannica Academic Edition: <http://www.britannica.com/EBchecked/topic/501483/rhizome>
- Brown, R. (1989). *Creativity: What are we to Measure? Handbook of Creativity*. New York: Plenum Press.
- Chandler, A. D. (1977). *The Visible Hand: The Managerial Revolution in American Business*.
- Chesbrough, H. (2003). *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Harvard Business School Press.
- Clark, B. (2012, April 5). *JOBS Act: What Crowdfunding Means For Your Startup*. Retrieved May 3, 2012, from Mashable Business: <http://mashable.com/2012/04/05/jobs-act-crowdfunding-startup/>
- Cozzi, G., & Spinesi, L. (2006). How much horizontal innovation is consistent with vertical innovation? *Research in Economics* , Vol. 60, N° 1, pp. 47-53.
- Cumming, D. (2007). Government policy towards entrepreneurial finance: Innovation investment funds. *Journal of Business Venturing* , Vol. 22, N° 2, pp. 193-235.
- Deleuze, G., & Guattari, F. (1972; 1980). *Capitalism and Schizophrenia*. London: Continuum International Publishing Group Ltd.
- Dell, K. (2008). *Times Magazine*. Retrieved February 17, 2011, from Spanner Films: <http://spannerfilms.net/review/crowdfunding>
- Drucker, P. (1968). *The age of discontinuity: guidelines to our changing society*. New York: Harper & Row.
- Eisenhardt, K. M. (1991). Better stories and better constructs: the case for rigor and comparative logic. *Academy of Management Review* , Vol. 16, N° 3, pp. 620-627.

## REFERENCES

- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review* , Vol. 14, N° 4, pp. 532-550.
- Elliott, J. (1980). Marx and Schumpeter on capitalism's creative destruction:a comparative restatement. *Quarterly Journal of Economics* , Vol. 95, N° 1, pp. 45-68.
- Empson, R. (2012, April 4). *Crowdfunding Platforms Look To Create Self-Regulatory Body*. Retrieved May 2012, 3, from Techcrunch: <http://techcrunch.com/2012/04/05/with-jobs-act-becoming-law-crowdfunding-platforms-look-to-create-self-regulatory-body/>
- Feagin, J. R., Orum, A. M., & Sjoberg, G. (1991). *A Case for the Case Study*. Chapel Hill: The University of North Carolina Press.
- Gans, J., Hsu, D., & Stern, S. (2002). When does start-up innovation spur the gale of creative destruction? *The RAND Journal of Economics* , Vol. 33, N° 4, pp. 571-586.
- Garcia, R., & Cantalone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: a literature review. *The Journal of Product Innovation Management*, Vol. 19, pp. 110-132.
- Gerber, E., Hui, J., & Kuo, P.-Y. (2011). *Crowdfunding: Why People Are Motivated to Post and Fund Projects on Crowdfunding Platforms*. Retrieved May 20, 2012, from [http://distworkshop.files.wordpress.com/2012/01/dist2012\\_submission\\_11.pdf](http://distworkshop.files.wordpress.com/2012/01/dist2012_submission_11.pdf)
- Graça, M. (2003). Organisation and Organising: the ontology in organizational analysis. *Cadernos de ciências sociais* , Vol.23, pp. 5-19.
- Hamman, R. (1996). *Rhizome@Internet: using the Internet as an example of Deleuze and Guattari's Rhizome*." Retrieved May 23, 2012, from Swinburne: <http://www.swinburne.infoxchange.net.au/media/halm316/gallery/david/pg11b.htm>
- Harper, D. (1992). Small N's and community case studies. In C. Ragin, & H. Becker, *What is a Case? Exploring the foundations of social inquiry*. New York: Cambridge University Press.
- Hayek, F. (1945). The use of knowledge in society. *The American Economic Review*, Vol. 35, N° 4., pp. 519-530.
- Hippel, E. V. (2005). *Democratizing Innovation*. Massachusetts: The MIT Press.
- Howe, J. (2008). *Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business*. New York: Crown Business.
- Howe, J. (2006). *The rise of crowdsourcing*. Retrieved from Wired: <http://www.wired.com/wired/archive/14.06/crowds.html>
- Kappel, T. (2009). Ex ante crowdfunding and the recording industry: a model for the U.S.? *Loyola University New Orleans College of Law* , Vol. 29, pp. 375-385.
- Kickstarter Blog. (2012, January 9). *kickstarter.com/blog*. Retrieved January 18, 2012, from Kickstarter Blog: <http://www.kickstarter.com/blog/dreaming-big>

## REFERENCES

- Kleeman, F., & Gunther, G. (2008). Un(der)paid Innovators: The Commercial Utilization of Consumer Work through Crowdsourcing. *Science, Technology & Innovation Studies* , Vol. 4, Nº 1, pp. 5-25.
- Koren, G. (2011, February). *smartermoney.nl*. Retrieved March 16, 2012, from Smartermoney: <http://www.smartermoney.nl/?p=671>
- Kornish, L. (2012). *Crowdsourcing Innovation: How to make sure you spot the best ideas*. Retrieved May 11, 2012, from co.create: <http://www.fastcocreate.com/1680322/crowdsourcing-innovation-how-to-make-sure-you-spot-the-best-ideas>
- Lambert, T., & Schwienbacher, A. (2010). *An Empirical Analysis of Crowdfunding*. Retrieved March 2, 2012, from: [http://www.crosnerlegal.com/images/47770544\\_An\\_Empirical\\_Analysis\\_of\\_Crowdfunding.pdf](http://www.crosnerlegal.com/images/47770544_An_Empirical_Analysis_of_Crowdfunding.pdf)
- Lawton, K., & Marom, D. (2010). *The Crowdfunding Revolution. Social Networking Meets Venture Financing*. Self-Published.
- Levitt, T. (1960). Marketing Myopia. *Harvard Business Review* , Vol. 38, pp. 24-47.
- Levy, P. (1997). *Collective Intelligence*. Cambridge: Perseus Books.
- Ley, A., & Weaven, S. (2011). Exploring agency dynamics of crowdfunding in start-up capital financing. *Academy of Entrepreneurship Journal* , Vol. 17, Nº 1, pp. 85-110.
- Likert, R. (1932). A Technique for the Measurement of Attitudes. *Archives of Psychology* , Vol. 22, Nº 140, pp. 1-55.
- Marshal, C., & Rossman, G. (1999). *Designing Qualitative Research*. Newbury Park: SAGE Publications.
- Martin, M. (1994). *Managing Innovation and Entrepreneurship in Technology-Based Firms*. New York: Wiley.
- Mason, J. (1996). *Qualitative Researching*. London: Sage.
- Massolution. (2012, May 8). *Crowdfunding Industry Report*. Retrieved May 9, 2012, from crowdsourcing.org: <http://www.crowdsourcing.org/editorial/total-global-crowdfunding-to-nearly-double-in-2012-to-3b-massolution-research-report/14287>
- Myers, M. (1997). *Qualitative Research in Information Systems*. Newbury Park: Sage.
- Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organizational Science* , Vol. 5, Nº 1, pp. 14-37.
- Ordanini, A., Miceli, L., Pizzetti, M., & Parasuraman, A. (2009). Crowdfunding: Transforming Customers into Investors Through Innovative Service Platforms. *Journal of Service Management* , Vol. 22, Nº 4, pp. 443-470.
- Osnabrugge, M. (2000). A comparison of business angel and venture capitalist investment procedures: An agency theory-based analysis. *Venture Capital* , Vol. 2, Nº 2, pp. 91-109.

## REFERENCES

- Pender, K. (2012, April 1). *Crowdfunding poses pitfalls for business owners*. Retrieved May 3, 2012, from SF Gate: <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2012/03/31/BUN71NSI9F.DTL>
- Ragin, C., & Becker, H. (1992). *What is a Case? Exploring the foundations of social inquiry*. New York: Cambridge University Press.
- Robertson, T. S. (1967). The process of innovation and the diffusion of innovation. *Journal of Marketing* , Vol. 31, N° 1, pp. 14-19.
- Roebuck, K. (2011). *Crowdfunding: High-impact Strategies - What You Need to Know: Definitions, Adoptions, Impact, Benefits, Maturity, Vendors*. ? : Emereo Pty Ltd.
- Rogers, E. (1962). *Diffusion of Innovations*. Simon & Schuster International.
- Rosenberg, N. (2004). Innovation and economic growth. OECD.
- Rosenberg, N. (1973). Science, invention and economic growth. *Economic Journal* , Vol. 84, N° 333, pp. 90-107.
- Schumpeter, J. (1950). *Capitalism, Socialism, and Democracy*. New York: Harper & Row.
- Schwienbacher, A., & Larralde, B. (2010). *Crowdfunding of small entrepreneurial ventures*. Retrieved April 2012, 12, from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1699183](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1699183)
- Sharma, P. (2011). *techpluto.com*. Retrieved February 16, 2012, from Techpluto: <http://www.techpluto.com/web-20-services/>
- Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks: Sage.
- Sternberg, R., & Lubart, T. (1996). An investment theory of creativity and its development. *Human Development* , Vol. 34, pp. 677-688.
- Styhre, A. (2006). Organization Creativity and the Empiricist Image of Novelty. *Creativity and Innovation Management* , Vol 15, N° 2, pp. 143-149.
- Styhre, A., & Eriksson, M. (2008). Bring in the Arts and Get the Creativity for Free: A Study of the Artists in Residence Project. *Creativity and Innovation Management* , Vol. 17, N° 1, pp. 47-57.
- Styhre, A., & Gluch, P. (2009). Creativity and Its Discontents: Professional Ideology and Creativity in Architect Work. *Creativity and Innovation Management* , Vol. 18, N° 3, pp. 224-233.
- Styhre, A., Wikmalm, L., Olilla, S., & Roth, J. (2010). Garbage-Can Decision Making and the Accommodation of Uncertainty in New Drug Development Work. *Creativity and Innovation Management* , Vol. 19, N° 2, pp. 134-146.
- Styles, C., & Seymour, R. (2004). Creativity and strategic innovation. *ANZMAC Conference*. New Zealand: Wellington.
- Sullivan, M. (2006). *fundavlog*. Retrieved March 6, 2012, from wordspy: <http://www.wordspy.com/words/crowdfunding.asp>
- Surowiecki, J. (2004). *The Wisdom of the Crowds: Why the many are smarter than the few and how collective wisdom shapes business, economies, societies and nations*. New York: Double Day.



## REFERENCES

Toffler, A. (1990). *Powershift: Knowledge, Wealth, and Violence at the Edge of 21th century*. New York: Bantam Books.

Toffler, A. (1980). *The Third Wave*. New York: Bantam Books.

Yin, R. K. (1993). *Application of case-study research*. Newbury Park Ca: Sage.

Yin, R. K. (1989). *Case study research: Design and methods*. Newbury Park Ca: Sage.

Yin, R. K. (1981a). The case study as a serious research strategy. *Knowledge: Creation, Diffusion, Utilization* , Vol. 3, pp. 97-114.

Yin, R. K. (1981b). The case study crisis: Some answers. *Administrative Science Quarterly* 26 , Vol. 26, pp. 58-65.

Yin, R. K. (1983). *The case study method: An annotated bibliography*. Washington D.C.: COSMOS Corporation.