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EWARD-BASED CROWDFUNDING: A STUDY OF THE ENTREPRENEURS' MOTIVATIONS WHEN CHOOSING THE MODEL AS A VENTURE CAPITAL ALTERNATIVE IN BRAZIL

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ABSTRACT

The main purpose of this study is to understand why Technology-Based Companies (TBCs) resort to reward-based crowdfunding as a financing alternative in Brazil over other alternatives that are already consolidated. In order to answer this question, we conducted a multiple-case study with four TBCs operating in different sectors and a platform hosting this type of campaigns. We found evidence that TBCs choose reward-based crowdfunding as a funding model because they are still in early stages of development, because they are after funds to finance specific projects and for motivations that do not directly involve raising funds. The findings corroborate the motivations mentioned in the literature and add new items.

Keywords: Crowdfunding; Entrepreneurship; Venture Capital; Case Study.

Cite it like this:

Amedomar, A., & Spers, R. (2018). Reward-based crowdfunding: a study of the entrepreneurs' motivations when choosing the model as a venture capital alternative in Brazil. *International Journal of Innovation*, 6(2), 147-163.
<http://dx.doi.org/10.5585/iji.v6i2.283>

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INTRODUCTION

The overall purpose of this research is to study reward-based crowdfunding as a financing alternative to Technology-Based Companies (TBCs) in Brazil. Crowdfunding has gained global momentum with the success of the US platforms Indiegogo and Kickstarter, launched in 2008 and 2009, respectively. In Brazil, the model emerged in April 2010, with the creation of the blog that gave rise to the website Catarse.me.

According to The Crowdfunding Industry Report 2015, the largest annual survey on the crowdfunding industry, the global revenues of the sector grew 167% in 2014, raising US\$ 16.2 billion, with 1250 platforms surveyed (Massolution, 2015).

The purpose of this research is to identify the reasons that led entrepreneurs of TBCs to choose reward-based crowdfunding as a financing alternative over other more conventional models. Therefore, we come up with the following research question: **why do TBCs choose reward-based crowdfunding as a financing alternative in Brazil?**

In order to answer the purposed question, this article is divided in five section in addition to this introduction.

The second section when regards the “Theoretical Framework” of Technology-Based Companies (TBC) and Crowdfunding; The methodology is described in Section “3-Methodology” and its results presented in section “4-Multiple Case Study”, while a profound analysis is undertaken in section “5-Comparative analysis of the cases”.

Finally, this article ends up with section “6-Conclusions”, which involves limitations and future studies, and section “7-References”. We chose to study reward-based crowdfunding because, in addition to being the most adopted model in Brazil (Steffen, 2015), it allows the proponent non-financial gains already identified in the literature.

Theoretical Framework Crowdfunding

The first definition of crowdfunding found was given by Lambert and Schwienbacher (2010). According to them, it is the voluntary collective participation of a large number of individuals through small individual contributions to projects. Other remarkable characteristics are:

- geographic and financial **dispersion** of investors (Lambert & Schwienbacher, 2010; Gerber, Hui & Kuo, 2012);
- **evolution of the Internet**, which allowed for the access to backers and funds (Brabham, 2008; Kleemann et al., 2008);
- establishment of **financial goals and temporal deadlines** in the campaign (Wheat et al, 2013; Cumming, Leboeuf & Schwienbacher, 2015). In a recent paper, Hossain and Oparaocha (2017, p.4) come up with the definition of crowdfunding used in this paper:

Crowdfunding is an Internet-based funding method for the realization of an initiative through online distributed contributions and micro-sponsorships in the form of pledges of small monetary amounts by a large pool of people within a limited timeframe. It is the financing of a task, idea, or project by making an open call for funding, mainly through Web 2.0 technologies, so funders can donate, pre-purchase the product, lend, or invest based on their belief in an appeal, the promise of its founder, and/or the expectation of a return.

There are different crowdfunding models in effect, being tested and improved. Although there are several propositions of subcategories, the categorization shown in the table below is based on the following studies: Mollick, 2013; Belleflamme & Lambert, 2014 and Monteiro, 2014.

Models	Characteristics
Reward-Based	Proponents create campaigns for a project, informing the financial and temporal deadline. The backers are rewarded with tangible compensations defined by the proponent, in proportion to their support. This is the most adopted model in Brazil (Steffen, 2015).
Equity crowdfunding	Proponents are entrepreneurs who offer equity interest in their companies to the investors.
Donation-Based	Proponents create campaigns for a project, informing the financial and temporal deadline. Backers are rewarded with non-tangible compensations or are not rewarded at all.
Loans	Proponents require a stipulated amount of loan by offering more favorable interest rates in relation to financial institutions. The investment returns to the backer as the proponent amortizes its debt.

Figure 2 – Summary of concepts - types of crowdfunding

Source: Prepared by the author.

Crowdfunding allows entrepreneurs to finance their business in an alternative manner through social networks (Buysere et al., 2012). Since the potential backers are not professional investors, they have less demands with regard to the quality of information required in comparison with the financial institutions (Schwienbacher and Larralde, 2010). Unlike financial institutions, it does not require an established track record as a conditioning effect to the transfer of funds (Kappel, 2009). It also offers an alternative that allows raising capital at a small-scale for entrepreneurs, an amount that can be considered irrelevant to the traditional investment players (Monteiro, 2014). Monteiro (2014) and Belleflamme, Lambert and Schwienbacher (2013) perceive the possibility of combining crowdfunding with other funding models. Monteiro (2014) states that crowdfunding can be an alternative to complement the acquisition of capital rather than replace the orthodox models.

Conducting reward-based crowdfunding campaigns equips the proponent of the campaign with non-financial outputs. These outputs are mentioned in the literature. Monteiro (2014) states that crowdfunding is more than simply funding, while Mollick (2013) claims that the model allows for advantages

other than the financial benefit. Many of these outputs are typical of crowdsourcing, as they reduce labor or production costs and facilitate the innovative activity (Brabham, 2013). Below we present those most discussed in the literature grouped into constructs built by the author based on the characteristics found in the literature.

Time effect

According to Brabham (2013,) crowdfunding offers creators the opportunity to implement projects with speed.

The platforms ensure flexibility throughout the whole process. For example, the website called Benfeitoria ensures the launching of an approved project within five days, while Catarse.me does so in four days.

With regard to the receipt of the funds raised, the platform called Kickante associates this term to the approval of the payment methods, but estimates 14 days. As for Catarse.me, the estimated deadline for the deposit of funds is 10 days.

Size effect and accessibility of the network of contacts

Having a network of contacts in sufficient size and accessible is a condition that could make it easier to raise funds through reward-based crowdfunding, which justifies the choice of the model.

According to Giudici et al. (2013) and Mollick (2013), the success of crowdfunding campaigns seems to be related to the size of the network of contacts or social network (especially on social networks) of the campaign's proponent – be it an individual or legal entity of any kind – and to the disclosure of the project in these networks throughout the duration of the campaign.

Marketing effect

For Monteiro (2014), the simplicity in the presentation of the campaigns facilitates the sharing and dissemination in social networks, generating visibility for the project. According to the author, even if the campaign does not reach its goal, its dissemination opens doors to future partnerships.

Marketing makes it possible to create a vast network of fans and disseminators of the product on the social networks and virtual communities, which will spread the news before it is available on the market (Ordanini et al., 2011).

Faoro and Abreu (2014) argue that early adopters may help other adopters to get to know the new technology, significantly contributing to the marketing of the product.

Feedback effect

Interaction with consumers and potential consumers allows several feedbacks about the product (Gerber et al., 2012), which has a huge value when it comes to small businesses that have little margin for error in the market. It is an alternative to validate an original idea through a specialized audience (Cocate & Pernisa Junior, 2011).

Mortara and Parisot (2014) interviewed 12 entrepreneurs (eight of which had already conducted at least one crowdfunding project) to try to understand the reasons that transform individuals into entrepreneurs and concluded that crowdfunding is seen, according to the sample, not only as the most convenient alternative to raise funds, but also as an opportunity to drive the market in search of feedback and test the demand for the product.

According to Belleflamme, Lambert and Schwienbacher (2013b), if the project is not funded, the project owner can take advantage of the feedback received during the campaign to make the necessary adjustments and re-launch the product.

The feedback effect has typical characteristics of crowdsourcing, especially regarding the collective intelligence to create new products (Howe, 2006). Bernardes and Lucian (2015) call this effect as the co-creation of value, as it gives to the consumer a possibility to start participating as an important ally in prior decisions about the product design.

Leverage effect

It can be understood as a product acceptance test with the potential consumer market even before its mass production. If a product reaches a certain number of backers, there is evidence of the existence of a demand for it, which enables the mass production. If there is evidence of high demand, the company becomes more attractive to major investors.

In crowdfunding, the production logic is reversed: selling before producing. It is a mechanism through which the company is able to gather information on the availability of payment from its consumers (Belleflamme, Lambert & Schwienbacher, 2013th, 2013b).

Gorchels states that one approach to determine the target price is to ask a controlled group of potential consumers how much they would be willing to pay for the product (Gorchels, 2000, 166), an option that indirectly exists in a crowdfunding campaign. The author calls this type of approach as *design by price* and

states that they are widely used in industries with rapidly changing technologies (Gorchels, 2000, 166), as those in TBCs.

However, Gorchels says that customers will almost always overestimate their willingness to buy in an artificial environment (Gorchels, 2000, 166), but it can be assumed that, in an environment where there is monetary exchange as in a crowdfunding campaign (that is, less artificial), this estimate tends to be more accurate.

In line with the previous paragraph, Monteiro (2014) points out that successful projects can benefit from the visibility of the platform to reach potential investors.

Technology-Based Companies (TBCs)

TBCs are defined as organizations based on the application of scientific or technological knowledge, employing advanced and pioneering techniques to obtain goods and services (Meirelles et al., 2008). Since TBCs are intensive organizations in terms of knowledge (Fernandes, Côrtes & Pinho, 2004), they are characterized for having a highly skilled workforce and technical ability in the customization of products (Pereira, 2007).

The literature features model propositions that indicate the stages to illustrate the life cycle of a TBC, from the conception of the idea to maturity. According to Pavani (2003, *apud* Tumelero, 2012), the development can be defined in five stages:

Stage of development	Financial characteristics
Conception / Creation	Zero revenue/negative cash flow
Startup	Very low and fluctuating revenue/negative cash flow
Initial Stage	Low or fluctuating revenue/negative cash flow
Growth/Expansion	Company reaches operational breakeven/revenue growth
Maturity	Restructuring/generation of dividends

Figure 1 - Stages of development and financing of companies.

Source: Pavani (2003, *apud* Tumelero, 2012).

Clarysse and Bruneel (2007) and Meirelles et al. (2008) point out that raising funds for TBCs is a critical activity because the business risks for foreign investors are too high. By addressing the issue from the perspective of the lender, Meirelles et al. (2008) state that there is total unpredictability in the generation of cash flow of TBCs wishing to be financed, so there is no real guarantee of return of the capital injected in the financing institution. Meirelles et al. (2008) and Jones & Jayawarna (2010) state that this situation is even more complicated when it comes to TBCs still in early stages of research, with immature or unfinished technologies.

Methodology

To understand the reasons that lead entrepreneurs from TBCs to choose reward-based crowdfunding as a financing alternative to

their business in Brazil, an exploratory study is recommended as they seek to gain greater familiarity with a problem (Gil, 2010,).

According to Eisenhardt (1989), the case study can be used to achieve several objectives, such as describing, testing and generating theory, and is appropriate for researching topics that are still in the early stages, such as reward-based crowdfunding.

Multiple-case study (Eisenhardt, 1989; Gil, 2010,; Yin, 2010), in which the most relevant cases are selected to obtain the desired answers, may also be used.

The studies are conducted through a semi-structured interview, which includes questions, based on theories and hypotheses, and lead to new hypotheses arising from the respondents' answers (Triviños, 1987). For Triviños (1987), the

semi-structured interview requires a script with the key questions that must be completed during the conversation with other questions related to the time of the interview. This method has been applied by Costa and Marinho (2017) concerning interviews with partners and specialists. Meirelles et al. (2017) apply semi-structured interviews on the issue of Distance Education, a technologic trend on similar level of development as crowdfunding. The script used can be found in the appendix.

With respect to the logic behind the multiple-case study, Yin (2010, 78) argues that each case must be carefully selected so that they can predict similar results (literal replications, that is, with the same patterns) or produce

contrasting results (theoretical replication, that is, with different patterns).

Figure 3 shows the evaluation methodology used to ensure the quality of the case study, based on Yin (2010, 64) and adapted to this study. All steps were applied to the study, following the proposed tactics.

First, the main constructs and variables were defined, based on the literature and empirical research. The results were analyzed, considering internal and external validity and consistence. The method applied and the case study process were presented, in order to guarantee that the study can be replicated by other researchers.

Case study	Tactics of study	Phase in which the tactics occurs
<u>Validity of the construct:</u> conceptually and operationally define the main terms and variables of the study	Using multiple sources of evidence; Establishing chain of evidence.	Data Collection
<u>Internal validity:</u> testing the internal consistency between the initial propositions and conclusions	Combination of patterns; Development of explanation; Using logical models.	Data Analysis
<u>External validity:</u> test the consistency between the results of the study and other studies.	Using the replication logic in multiple-case studies.	Research Project
<u>Reliability:</u> demonstrate that the study can be replicated	Developing a case study database.	Data Collection

Figure 3 - Case study tactics for four projects testing

Source: Adapted from Yin (2010).

Based on the assumptions described in Figure 3, we considered the companies identified in the reward-based crowdfunding and that fulfilled the following criteria:

- three TBCs operating in different sectors, financially successful in their campaign; these cases are aimed at literal replication (Yin, 2010, 78);
- one TBC which failed in its reward-based crowdfunding campaign; this case is aimed at

theoretical replication (Yin, 2010, 78);

- one reward-based crowdfunding platform; this case is aimed at literal replication (Yin, 2010 78).

Once the criteria were defined, all Reward Based Crowdfunding projects developed in Brazil and all host platforms – collected in 06/15/2015 - were listed and the companies were selected among them.

Figure 4 summarizes the cases studied:

TBC	Sector	Respondent's Qualification
Dumativa	Electronic games	Partner
Metamáqui	Hardware	Partner
Trip Tips	Applicatio n	Partner
E- Mobilidade	Applicatio n	Partner
Catarse	Platform	"Information Remixer"

Figure 4 – Cases Studied

Source: prepared by the author.

Multiple-case study

Dumativa: "The Legend of Hero – The Game" campaign

Dumativa is a company founded in 2012 in the city of Rio de Janeiro/RJ, focused on the creation and provision of programming, design, literature and music services. Conducting the campaign on the Catarse.me platform aimed at the production of The Legend of Hero – The Game, a game that originates in the animated series The Legend of Hero, created in 2012 by the Castro Brothers (popular content producers on the Internet) with a satirical and musical narration of the phases of a fictional game.

The main motivation for choosing reward-based crowdfunding was to test the acceptance of the product along with its potential consumer market through its participation in the initial stage of development. The respondent partner said that, through crowdfunding, approximately 7,000 copies were sold even before it was released on the market and that these early adopters acted as multipliers in the product dissemination. Thus, further concerns with demand were mitigated and its development gained momentum.

The respondent stated that the financial effect was not the main motivation for the company to choose reward-based crowdfunding and that these funds could have been raised

through other financing alternatives. One reason for the low initial expectation would be the habit of Brazilian consumers of not making transactions of low amounts via internet, a behavior that affects the company's business. The entrepreneurs stated that the investment requested (R\$ 80,800.00) was high for the Brazilian standards, which implied a high risk of failure.

Thus, resorting to reward-based crowdfunding was not the first option of the company initially. It can be said that it was even the third option, as it planned to fund it with the capital from Castro Brothers and Dumativa or even via venture capital. The turning point relied on the initiative of Dumativa after the initial evolution of the game script, when the company started seeing in crowdfunding an opportunity to test the product demand with its audience.

Among other relevant effects, the respondent stated that the time for raising the funds was one of the decisive reasons on the use of reward-based crowdfunding – raising the capital in other ways is more bureaucratic, which would delay the product launch and could thus lose the moment of success and the enthusiasm of the fans. The returns with the feedback and leverage were also classified as known and highly anticipated by the campaign promoters.

It should be noted that, for the company, the funds from crowdfunding would consist of

short-term capital, allocated to cover only the direct expenses of the Legend of Hero – The Game. Funding the company through a campaign would only be possible if the orders exceeded the production cost, with “profit” on the project. According to the respondent, *“despite the amount, funding has a date to end. What sustains the company is the sale of its product.”*

As for its stage of development at the time of completion of crowdfunding, the company had experience in the production of games for mobile phones.

On 09/20/2014, the campaign was completed with an investment of R\$ 258,587.00 from 6112 backers.

E-Mobilidade: Encarte Mobile campaign – “Mobile Leaflet”

E-Mobilidade, founded in 2014 by two partners, in the city of Juiz de Fora/MG, wanted to fund the mobile app called *“Encarte Mobile”*, a type of digital leaflet that searches and compares prices in supermarkets and shops. The company is a unique case in the Brazilian reward-based crowdfunding, because from 12/2013 and 03/2014 it conducted two projects, where the first was unsuccessful and the second was successful.

One of the partners interviewed ensures that one of the main motivations for their first campaign was to gather information and test the acceptance of the product with the possible consumer market.

Another purpose highlighted was to build an engaged network able to advertise the product, characteristics present in the “marketing” effect.

Thus, the determining factor to launch the reward-based crowdfunding campaign consisted of the motivations described above rather than the financial effect.

Despite this relativization of the financial potential, the partner stated that the reward-based crowdfunding eventually became the most viable option to raise additional resources for the development of *Encarte Mobile*, mainly due to the difficulties imposed by the other alternatives. The respondent stated that he was aware that

other investment modalities require evidence of financial capacity or the presentation of a detailed project as a precondition for the injection of funds. E-Mobilidade did not have either of these requirements.

Illustratively to this situation, the respondent stated that the first crowdfunding campaign attracted an angel investor from his region and that the parties started a conversation, but the presentation of the company’s business plan was required to formalize the business. Since the partners are professionals in the information technology area, they did not have any expertise in relation to the management tools to develop the business plan and for this reason they did not complete the formal presentations for the investor.

Aware of these limitations, the partners invested in reward-based crowdfunding, as it would be a less bureaucratic alternative of fundraising.

Thus, the reward-based crowdfunding was not the alternative best suited the reality of the company’s needs. This choice only occurred because of the bureaucratic limitations imposed by the investors and the non-financial results obtained with a crowdfunding campaign. For example, the respondent did not hesitate to say that crowdfunding is a fantastic marketing and dissemination tool for a startup.

In addition, other investors appeared during the campaign, more interested in helping in the establishment of the company and business model than with the financial proposals. None of these contacts evolved beyond the initial conversations.

With regard to the other effects, the partner stated that he knew and expected to obtain enough return in terms of time, size and accessibility of the company’s network of contacts and/or partners and feedback (a significant return of this type was obtained through the comments tab in Catarse.me). The expectations regarding the return on the leverage effect were lower (bumped into the already explained bureaucratic limitations).

Since Encarte Mobile was the only application hitherto developed by E-Mobilidade, it is natural that the funds pled in the crowdfunding campaign, despite being directed

to the development of *Encarte Mobile*, also funded the company's operations until it could grow organically.

The first reward-based crowdfunding campaign of *Encarte Mobile* raised only R\$ 4,743.00 (9.6%) from 76 backers. In the second campaign, the final result was positive: the campaign raised R\$ 5,665.00.

Metamáquina: Metamáquina 3D campaign

Metamáquina's mission is to make 3D printing popular in Brazil, a company from São Paulo/SP, established in 02/2012 by three students. The company needed funds to enable the reproduction of a printer named Metamáquina 3D to allow them to start a business.

Choosing the reward-based crowdfunding was natural. The partners needed funding for the production of machines and a number of factors indicated that this would be the best option to obtain it.

One of them was the compatibility between the values of the community visiting hackerspaces, of which the partners are part, and the crowdfunding. There would be a real possibility of meeting people willing to financially support the projects developed there and are still in the embryonic stage – an alternative that would be difficult to obtain if they resorted to financial institutions. This characteristic can be seen in the Size effect and Accessibility of the company's network of contacts and/or partners, identified in the literature.

Nevertheless, at the time of launch of the crowdfunding campaign, Metamáquina was still a very informal company and so the partners believed that they had insufficient material to seek investments with investors or financial institutions. In turn, crowdfunding did not require any formalities other than a good presentation of the project.

The respondent concluded that, based on these characteristics, reward-based crowdfunding was the most affordable and most appropriate alternative to the stage of development of his company at the time.

These many effects pointed the reward-based crowdfunding as being in fact the first alternative of the team to raise the funds that

would finance the initial production of the company. The choice was finally made after a meeting with Catarse.me at an event in which they were convinced to develop the campaign that would be ultimately successful.

Among other effects that influenced the choice of the reward-based crowdfunding, the time effect was classified as known prior to the campaign and with high expected return. The partners knew that they would be able to quickly raise the funds and start production. In fact, the process from the beginning of planning to the transfer of funds took only six months.

The size effect and accessibility of the company's network of contacts and/or partners was already known and they expected to get some return in this regard during the campaign, mainly from the hacker community (attended by the partners). The leverage effect is also in the same category, as the partners believed they could get more funds from other sources if they conducted a successful crowdfunding campaign that enabled the production of the first machines.

Considered less relevant to the decision-making, the marketing and feedback effects were known as possible the returns of the campaign but they did not expect any return of this kind. The final result proved that the partners were correct about the prospects on feedback (the little they obtained was related to the manufacturing process of the machines, but not the business itself), and were wrong about the marketing results (essential for the dissemination and consolidation of the company's identity).

The respondent says that the funds raised via crowdfunding were used to finance the production of the first marketable machines of the company.

The final result of the campaign in Catarse.me registered an effective contribution from 160 people and raised R\$ 30,036.00, exceeding 30.59% of the official target.

Trip Tips: Trip Tips App campaign

The company Trip Tips, from São Paulo/SP, started its business in 2011 from Facebook group with the same name, which gathered individuals interested in voluntarily exchanging travel tips about destinations all over the world and that

featured over 24,000 collaborators in 05/2015. The founders of the group wanted to build an app that would systematize all the information generated and whose content could be accessed by the users from anywhere.

Choosing the reward-based crowdfunding was mainly due to the financial effect, as it was a feasible financing alternative to take advantage of the size of the community built through social networks.

As for the other effects that were relevant to the decision, time, size and accessibility of the company's network of contacts and/or partners were known before the beginning of the campaign and therefore, the company expected to get enough return from them. On the other hand, despite previously knowing the feedback, leverage and marketing effects, the company expected to get a lower return from these types. The interview revealed that the latter even generated negative results after being compared and associated with "kitties" – she says she heard many derogatory jokes because of this association and thus she believes that there is prejudice against the use of crowdfunding by startups in Brazil, as if requesting funds to others demonstrate a business weakness or inability to raise funds via traditional means.

In fact, reward-based crowdfunding was the only option considered for the inflow of funds at the time. The manager interviewed stated that he did not conduct any further study on any funding model before – the company did not even have a business plan, it was only aware of the successful campaigns of products aimed at the tourism sector in foreign websites. From planning to execution, the whole process was conducted with immediacy and intuitively, he emphasizes.

The situation described above led the company to conclude that reward-based crowdfunding was in fact the most appropriate option for the company's stage of development at the time.

The proceeds raised from the crowdfunding only focused on the financial needs for the development of the Trip Tips app and would not pay for operating expenses or any other venture of the company. All other activities are sustained with the company's funds arising

from the sponsorship of a foreign exchange broker (the same involved with the Cash Passport Trip Tips card) and a travel agency, which get advertising on the website, and the personal assets of the company's partner.

Finally, on Dec/22/2014, the campaign raised R\$ 81,215.00, 0.51% above the target, from 350 backers.

Catarse

According to the interviewed representative of Catarse, companies choose reward-based crowdfunding as a financing model for their projects, because it is the most agile and less bureaucratic – in approximately ten days after the end of the campaign, the funds are already in the proponent's account ready to be invested – and guarantees the independence of the entrepreneur in relation to the business culture and routines and product development

Another motivation is to validate an idea about a product or business with the potential target audience (feedback effect), understanding that the support with financial resources is the result of a much more critical analysis by the backer than the support without money. In other words, the backer always has three options: "voting in companies with money", providing non-financial support (through the dissemination on social networks, for example) or not support in any way. When many backers choose the first option, the most expensive and with greater risks involved, this decision is the result of an analysis far more critical of the value for money involved in the transaction, indicating a collective approval of the item and justifying a possible large-scale production *a posteriori*.

The respondent believes that reward-based crowdfunding has this vocation of validating ideas regardless of the stage of development of the TBC. Empirically, the respondent claims that most of the campaigns launched on the platform is from early-stage companies, but there are cases of more consolidated companies seeking financing for new projects.

To the above effects, the respondent stated that time, marketing and leverage are usually known to TBCs before the campaigns and

that they expect to obtain a high return. In turn, the size effect and accessibility of the company's network of contacts and/or partners is as well known but with lower expected return.

Finally, the potential visibility given by the media to certain campaigns is highlighted as relevant to the decision on reward-based crowdfunding. Such disclosure would enhance the dissemination of the brand and the product.

The respondent points out that the importance of the financial effect must be analyzed individually, case by case. This is because there are companies that focus on the financial target, but there are those that favor other attributes. However, the respondent is confident by stating that this effect should not be the main motivation of TBCs when launching campaigns, since such gains are limited, while gains from feedback can be much larger.

In spite of these advantages, the respondent believes that reward-based crowdfunding can not yet be seen as the first option for financing TBCs. He argues that, at the national level, the model is still seen by many areas as an "emergency" resource used when there was no success with others or there is no time to wait for a more bureaucratic process (specifically mentioning fundraising via public notices). However, the respondent points out and believes in a slow change in this perception.

As most campaigns are conducted by early-stage TBCs, the respondent could not render an opinion on the funding model used by companies before the crowdfunding campaign. In fact, he believes that there is still no sufficient sample to point out whether a method is used more than others.

Comparative analysis of the cases

The results of the interviews suggest that TBCs opt for crowdfunding mainly as a complementary alternative to raise funds to finance specific projects rather than operating costs. In the cases studied, the model was used to raise funds for the projects "The Legend of Hero - The Game", "Trip Tips App", "Encarte Mobile" and "Metamáquina 3D". In the case of E-Mobilidade, the company reported no sales, but all the proceeds obtained were considered to specifically fund the *Encarte Mobile* project.

This trend was corroborated by the case study of Catarse.me website, which only hosts campaigns of projects classified as "creative" and refuses to host projects focused on raising funds for the continuous maintenance of activities or for personal expenses.

Thus, the results of the interviews reinforce that reward-based crowdfunding is a venture capital intended to finance specific projects of companies and therefore does not replace other sources of funds. On the contrary, it may even be combined with one or more models, as mentioned by Monteiro (2014) and Belleflamme, Lambert and Schwienbacher (2013b)

The financial effect was the most relevant to the decision-making in the cases of Trip Tips and Metamáquina, which focused on the size of the pre-existing community in relation to the partners or the brand. The confidence of both companies in the support from its target audience was such that reward-based crowdfunding was in fact the first and only financing option considered for development.

As for Dumativa, the financial effect was not the primary motivation for choosing reward-based crowdfunding, as these funds could be raised organically.

For E-Mobilidade, the respondent guaranteed that he was aware of the limited financial scope of the model in Brazil. In view of the company's needs, reward-based crowdfunding was not his first option. The low expectations can still be explained by the fact that E-Mobilidade does not have any community previously formed in relation to the project, an effect deemed crucial for the success (Schwienbacher & Larralde, 2010; Gerber et al, 2012; Monteiro, 2014).

With a privileged view of those who see campaigns as a platform, the opinion of the representative of Catarse.me reinforces the situation described by E-Mobilidade. He believes that reward-based crowdfunding cannot yet be seen as the first financing option for most TBCs, because the model is seen as an "emergency" resource, used when there has been no success with others or there is no time to wait for a more bureaucratic process. However, the respondent believes on a slow change in this perception.

It was also possible to corroborate the existence of other effects already mentioned in the literature as influential in the choice of reward-based crowdfunding, such as: time effect, marketing effect, feedback effect, leverage effect, and size effect and accessibility of the network of contacts.

The time effect was pointed out by all respondents as known prior to the campaigns and having high expected return. The companies sought to obtain resources quickly to initiate the project and perceived on reward-based crowdfunding the model that provided such agility, as mentioned by Brabham (2013, 40). This logic is reinforced by the approximate time to receive the funds in Catarse.me: in about ten days after the end of the campaign the funds are credited to the project owner's account.

If the prior knowledge about the time effect was unanimous, the marketing, feedback and leverage effects did not have any expectation of return by some of the respondents.

With regard to the marketing effect, in the case of Trip Tips, it was found that it had a dual effect on the company. A negative effect on the company's image, for being associated with the process of asking for money to people you know, an action popularly known as "kitty". And a positive effect, because thanks to the dissemination on social networks, the company entered into new partnerships – a characteristic predicted by Monteiro (2014).

As for Metamáquina 3D, the small initial expectation on the same topic proved to be mistaken, since reward-based crowdfunding was a fundamental mechanism for the dissemination and consolidation of the brand. A vast network of fans and disseminators of the product on social networks and virtual communities can be created from the marketing generated by a crowdfunding campaign, as signaled by Ordanini et al. (2011).

Despite the suspicion of some individuals, the marketing effect was highlighted as the main motivation of the company E-Mobilidade to conduct its campaign. The marketing plan sought to build an engaged network able to promote the product after the campaign. This point had also been identified by Ordanini et al. (2011). It is

worth noting that the company was the only one of the study that had no pre-existing community in relation to the project and intended to develop it with the campaign.

In addition, the respondent stated that the potential visibility given by the media for certain crowdfunding campaigns, a characteristic inherent in the marketing effect, is one of the determining factors in the choice of the model, because it seeks to strengthen the brand and the product.

With regard to the leverage effect, the lack of expectations of return of this kind, when it occurs, is closely related to the low expected financial return, as in the case of the *Encarte Mobile* project: since it would neither be possible to raise a large amount of funds, nor attract larger investments from other models.

However, it should be noted that none of the cases indicate any evidence that the leverage effect has been effective in attracting visibility of potential investors, contrary to what is provided by Monteiro (2014).

A relevant aspect to the leverage effect is the test of the potential demand. This effect was pointed by Dumativa and E-Mobilidade as the most relevant to choosing reward-based crowdfunding as a financing model. It was also classified by Catarse.me as one of the effects that attract companies to the platform. The respondent justifies that measuring the demand for products via reward-based crowdfunding is more realistic than other methods used to estimate it (such as free voting or a recommendation to buy the company's product), as it is the result of a more critical analysis of the cost-benefit ratio involved in the transaction by the backer rather than a non-monetary support. Such decision stems from the cost of seeing the money invested not generating any return to the person. This logic is in line with Gorchels (2000, 166) with regard to testing the buying intention in artificial environments, in which this desire is always overestimated.

Bringing this analysis to the collectivity, when many people decide that the cost-benefit ratio offsets the transaction risk, there is evidence that would justify the large scale production of the product *a posteriori*.

With regard to the feedback effect, the Metamáquina case shows that a crowdfunding campaign can generate more comments about the company itself and its service (such as suggestions on the production of 3D printers and printing techniques) than for the project under campaign.

The size and accessibility of the network of contacts was identified as one of the fundamental conditions that led Metamáquina to choose reward-based crowdfunding. The representative of Metamáquina said that he noticed a compatibility of values between reward-based crowdfunding and the community visiting hackerspaces, to which the partners belong. Within this community there would be the possibility to find backers willing to invest in the campaign, disseminate it, contribute with ideas, etc. This characteristic made the choice of the financing model to be almost "natural" according to the respondent.

The interviews and case studies allowed adding other items to the list of those previously identified in the literature: the accessibility and independence effects.

The accessibility effect can be defined by the informality in the development a reward-based crowdfunding campaign, a characteristic markedly opposed to the strict and bureaucratic process of other financing alternatives.

While crowdfunding only requires that the company fits the platform standards – which are generally simple – financial institutions will invariably require the submission of a business plan, evidence of financial capacity or the presentation of a detailed project as a precondition for the injection of funds.

This effect corroborates Kappel (2009), when he says it is not necessary that the applicants have an established track record as a conditioning effect to the transfer of funds, as in orthodox models.

That was the reality evidenced in the cases of Encarte Mobile and Metamáquina 3D, in which the reward-based crowdfunding emerged as the only viable option to raise funds due to the early stage of development of the products and the companies themselves. In the case of Trip Tips App, although the accessibility effect has not been directly pointed out, it can be assumed to it may have been influential as the

campaign was conducted with immediacy and the company did not have financial transactions or a business plan.

Finally, this perception is further corroborated by Catarse.me, to which the accessibility of the model is one of its main advantages.

Another determining effect for choosing reward-based crowdfunding was identified separately in the interview with Catarse.me., the independence effect, understood as the autonomy of the entrepreneur in relation to the business management.

Here, there is opposition to models such as venture capital and angel investors, in which one of the requirements for the capital injection is the participation in the management of the business, partially removing the freedom of entrepreneurs to run the business.

On the one hand, we did not identify an effect that caused all the companies surveyed to resort to reward-based crowdfunding, but on the other hand, we identified a profile similar to all of them in relation to their stage of development: all TBCs were in the early stages of operation and had not reached operating stability.

Out of the four cases studied, one company did not even have a product or service and its cash flow was negative (E-Mobilidade), two had very low and fluctuating revenues, negative cash flow and had products or services not directly related to the project launched in the crowdfunding (Metamáquina and Trip Tips) and only one had products or services directly related to the project, which generated a low, fluctuating revenue (Dumativa). The experience of Catarse.me reinforces the analysis by pointing that most of the campaigns is promoted by companies in the early stages of activity.

Based on the conceptualization between the stage of development of the TBC and the associated type of financing proposed by Pavani (2003, apud Tumelero, 2012), the result of the interviews indicates that reward-based crowdfunding can be understood as a seed capital alternative, as it was used to finance projects of startups.

Conclusions

A multiple-case study was conducted with the purpose of answering the following research question: **Why do TBCs choose reward-based crowdfunding as a financing alternative in Brazil?** Five companies were selected for the study: three companies that were successful in their campaigns (from different sectors of activity), one unsuccessful company (but which raised significant funds) and a crowdfunding platform (Catarse.me, a pioneer website in the country).

Conclusively, the answer to the research question is: TBCs choose reward-based crowdfunding as a funding model for being companies in the early stage of development (with little or no circulation of funds) and seek funds to finance specific projects; there is evidence that they also seek outputs that go beyond the financial results, such as: agility to receive the funds (time effect), ability to test the brand communication strategies with their target audience (marketing effect), possibility to receive feedback from potential consumers to validate the concept of the product (feedback effect), ability to test the potential demand for the product (leverage effect), independence in the management of the business (independence effect), ease of access to the model (accessibility effect) and the possibility to use a pre-existing community relating to the company (size effect and accessibility of the network of contacts).

Another finding that helps understand the reasons is their size. All TBCs were in the early stages of operation and had not reached operating stability.

Therefore, there is evidence indicating that reward-based crowdfunding acts as a seed capital, used to finance companies in the startup stage (as classified by Pavani, 2003 apud Tumelero, 2012).

The perception of Reward Based Crowdfund as a source of high valuable information adds a new tool on the entrepreneurship framework, contributing to strength the newly born companies hypotheses and business models.

Limitations

Some limitations may be inferred on the methodology. In a multiple-case study, the higher the number of cases the more consistent the data and the more robust are the findings. However, due to lack of time and the difficulty to contact the companies, we focused on only five cases.

Future studies

The subject is new and extensive, thus there are several segments to be explored. Deepening the understanding of each of the non-financial motivations that lead entrepreneurs to seek reward-based crowdfunding, through other case studies or surveys conducted with a significant sample would be important to the academic community and for the platforms to consolidate the understanding of these effects. The same applies to new research studies that seek to contribute to the understanding of the conditions of success raised here.

The antecedents of projects must be carefully analyzed from the point of view of individual founders, funders and platforms. A deep understanding of all the related variables is essential.

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Appendix – Script of interviews

- Q1** - Why did you choose crowdfunding as a financing alternative for your company?
- Q2** – At the time you resorted to crowdfunding, was it your first choice to raise funds? If not, what was it and why the business did not materialize?
- Q3** - Did you perform (or at least thought of performing) crowdfunding together with other financing alternatives? If you conducted this strategy, with which alternative did you combine it?
- Q4** - How was your company funded prior to the injection of funds through crowdfunding? If you have already received investments in the past, what was the type of venture capital raised and would you say that the experience with the previous choice was successful?
- Q5** - In terms of investment value, did you believe at the time that crowdfunding was the option that best suited your financial needs?
- Q6** - What was the stage of development of your company at the time you performed crowdfunding? Do you believe that crowdfunding was the option that best suited that stage?
- Q7** - Would you say that there were non-financial reasons that influenced you decision to perform reward-based crowdfunding as a financing alternative? If yes, please comment whether the following effects influenced your decision for crowdfunding and with what intensity:

	Degree of influence		
	Low	Medium	High
<i>The time effect. [The funds raised via crowdfunding are obtained in shorter time when compared to other investment alternatives]</i>			
<i>The size effect and accessibility of the company's network of contacts and/or partners. [A large and accessible network of contacts can attract investments more easily].</i>			
<i>The marketing effect of my product. [Crowdfunding can be used to test the company's marketing tools and strategies for the product].</i>			
<i>The feedback effect. [I performed the crowdfunding campaign to get feedback on my product].</i>			
<i>The leverage effect. [I performed the crowdfunding aware that it would be an alternative to validate my product and obtain greater investment from other sources more easily].</i>			