Openness and Crowdfunding

Succeeding by opening up

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Abstract

Title: Openness and Crowdfunding – Succeeding by opening up

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Crowdfunding is an emerging way of financing that has been growing at a fast pace in the past few years. The present dissertation aims to study the impact of openness on the success of Crowdfunding platforms. This research analyzed 274 platforms operating in 2014, attributing them a score of openness. The degree of openness is then correlated with performance indicators, such as the number of global users, the global rank of the platforms and the number of Facebook fans. The results of the analysis show that openness is positively correlated with greater adoption of Crowdfunding platforms. In conclusion, given the crowd based nature of this phenomenon, this study shows that opening up, allowing a greater interaction with the external environment, is a beneficial strategy for Crowdfunding platforms.

Resumo

Título: Openness and Crowdfunding – Succeeding by opening up

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O Crowdfunding é uma inovadora forma de financiamento que tem vindo a crescer a um ritmo elevado nos últimos anos. A presente dissertação pretende estudar o impacto que a abertura das plataformas de Crowdfunding, tem no sucesso das mesmas. Para o estudo, foram analisadas 274 plataformas em atividade no ano de 2014, sendo-lhes atribuídas uma pontuação de acordo com o seu grau de abertura. O grau de abertura das plataformas é então correlacionado com indicadores de *performance*, tais como o número global de utilizadores, o ranking global das plataformas, bem como o número de fãs no Facebook. Os resultados da análise efetuada indicam que a abertura está positivamente correlacionada com uma maior adoção das plataformas de Crowdfunding por parte dos utilizadores. Em conclusão, sendo este fenómeno baseado no *"crowd"*, ou seja, tendo como base as pessoas, o presente estudo mostra que adotar uma maior abertura, permitindo uma maior interação com o ambiente externo, é uma estratégia benéfica para as plataformas de Crowdfunding.

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Introduction

This dissertation focuses on openness and how it is linked to the success of this emerging way of financing called Crowdfunding.

On the one hand, openness has been the subject of a number of research articles and despite the different settings and industries in which it has been studied, the idea that a firm cannot innovate in isolation, needing to absorb knowledge from the external environment (Chesbrough, 2003; Dahlander & Gann, 2010), and that by doing so it can even come up with better solutions when compared to a closed environment (Lakhani, Jeppesen, Lohse, & Panetta, 2007), seems to prevail.

On the other hand, Crowdfunding is commonly defined as an open call, from a distributed group of people, for financial resources (Belleflamme, Lambert, & Schwienbacher, 2013a; Gerber & Hui, 2014), and its success depends on the ability to raise a sufficient base of online support, a network of people big enough to back the projects (Agrawal, Catalini, & Goldfarb, 2011). Hence, this way of financing based in the crowd, in which the network or community building play an important role, seems to be strongly related to openness.

Although both openness and Crowdfunding has been the subject of a considerable amount of research, at the present date no research has been made in order to assess the relationship between these two concepts.

Aims and research question

Crowdfunding has been growing rapidly in the past few years, with hundreds of online platforms giving people worldwide the chance to get their projects funded by millions of people interested in investing their money, or simply donating to a good cause. By offering an easier and simpler way of financing, Crowdfunding has been challenging traditional financial institutions worldwide, changing the way capital allocation flows (Belleflamme et al., 2013a).

Nonetheless, as a number of new platforms appear every year, a significant part of them disappear without even reaching maturity, not being able to succeed even though their offer was as much as innovative. But, as some platforms were able to create a large community of

users globally that ensured a basis for growth and success, it enabled them to build upon their awareness and trustworthiness.

Factors influencing the platforms' success, or at least creating a distinction between them can be as varied as the geographical presence and restrictions, the possibility for users to access them through social networks, the existence of discussion forums and so on. These factors can be seen as indicators for the degree of openness of a Crowdfunding platform.

Given this, the main purpose of the present dissertation is to analyze what is the role that openness plays in the life of Crowdfunding platforms, how important are these attributes and which of those can be more beneficial. Thus, the research question being addressed is:

How does openness impact the success of Crowdfunding platforms?

In order to explore the research question, I will start by reviewing the extant literature exploring the concepts of openness and Crowdfunding. The next step is the collection of data, starting with an initial sample of 390 Crowdfunding platforms, that were subject of analysis in the prior research presented in Villarroel and Onofre (2013), assessing their degree of openness based on the chosen criteria. A set of performance/success indicators will also be presented for each platform, so the appropriate conclusions can be drawn.

Analyzing and understanding this question should provide useful insight on how the choice of opening to a larger or shorter extent can impact the performance and future success of the Crowdfunding platforms. This can have implications on the business models adopted in the future for the new platforms entering the market.

Literature Review

The present Literature Review chapter will help clarifying the main concepts underlying the present study. On the first section an overview on the extant literature on openness is presented, explaining the links between openness and the ability of companies to overcome barriers related to the difficulties to access resources. The second section introduces the concept of Crowdfunding, exploring the main characteristics of this new way of financing. The following section is an important part of this Literature Review, as it describes the concept of Crowdfunding platform, which was ultimately the basis of this research. On the final section, the most important motivational factors for participation in Crowdfunding activities are analyzed, being an important factor in understanding the role openness plays in the success of Crowdfunding platforms.

Openness

Chesbrough (2003) supported the idea that firms not only can but should combine internal ideas with ideas coming from the outside, as they look to evolve. Thus, openness can be defined as the different ways of relationship a firm has with external actors (Dahlander & Gann, 2010). This same author carries Chesbrough (2003) idea, defending that openness arises as a company is not able to innovate in isolation.

Further, Lakhani, Jeppesen, Lohse and Panetta (2007) states that practicing the norms of openness and information sharing in a peer-production setting enables firms to create complex technological products that can compete, and even outperform similar products produced by proprietary efforts. Still, whereas the creation of innovations benefit from openness, profiting from innovations requires appropriability. Here is where the paradox of openness arises (Laursen & Salter, 2005).

Laursen and Salter (2005) present a different side of the question, defending the idea that firms sometimes need to limit the use of external resources, bounding the exchanges with the external environment, in order to ensure the necessary appropriability. On top of that, this author suggests that companies operating in environments with high levels of technological opportunities and where firms have a high degree of absorptive capacity are most open to external resources. Also, Laursen and Salter (2005) add that, interestingly, industries with high

levels of appropriability are also industries with high levels of openness and technological opportunities, and that larger firms are more likely to be open. The explanation supporting this idea defends that smaller firms are constrained in terms of available resources, and they may not be able to do as much external search across different sources of knowledge. Additionally, as innovations introduced by smaller firms are less complex in nature, the benefits of searching among a broader set of sources of innovation may be consequently shorter. Hence, by opening up, companies are able to broadcast problem information to external actors. Even though knowledge is unevenly distributed in society (Lakhani et al., 2007), it is much more largely distributed today than some decades ago, allowing a greater diffusion of knowledge, questioning the desirability of a closed environment approach to access and market new ideas (Chesbrough, 2003). Innovation rises where the knowledge is harder to access or communicate, making broadcast search beneficial (Lakhani et al., 2007).

In conclusion, the external knowledge environment is a key resource allowing external actors to understand what is happening and why, giving them a bigger accessibility, enabling them to influence the direction of a community so that their needs are better satisfied (West & O'mahony, 2008), which potentially gives rise to new business opportunities for firms (Chesbrough, 2003).

Crowdfunding

The concept of Crowdfunding derives from another social media phenomenon (Ley & Weaven, 2011), a broader concept called Crowdsourcing, defined as the process where firms outsource business functions to an undefined, large network of people through an open call (Howe, 2006; Qiu, 2013; Villarroel, 2008). Thus, openness plays an important role in the development of this emerging way of financing.

The concept is still in its infancy, having the first Crowdfunding platforms appeared on the Internet nearly a decade ago (De Buysere, Gajda, Kleverlaan, & Marom, 2012), and it is changing the way capital is allocated, creating a viable way for outside funds to be channeled to start-up ventures (Belleflamme et al., 2013a). Crowdfunding can be described as the efforts by entrepreneurs to fund their ventures, relying on relatively small contributions from a wide number of individuals, using their social networks (De Buysere et al., 2012; Mollick, 2014). It combines the emotional involvement of entrepreneurship with the financial returns of

investment, allowing founders and funders to align their interests in early stage projects (De Buysere et al., 2012). Regardless of the importance geography has for venture capitalists (Sørheim, 2003), Crowdfunding is changing the nature of geography and association in new ventures (Mollick, 2014). Through its online platforms it is reducing economic barriers associated with investing in early-stage projects over long distances (Agrawal et al., 2011). Contrasting to offline transactions, access to capital for early-stage ventures is not so strongly constrained by the founder's location (Agrawal, Catalini, & Goldfarb, 2013).

The provision of financial resources made through this open call can be done in the form of donations or in exchange for the future product or some other form of reward (Belleflamme et al., 2013a). Belleflamme, Lambert and Schwienbacher (2013b) present two forms of Crowdfunding dominating the market: pre-ordering and profit-sharing. Whilst the first one allows the entrepreneur to extract larger profits, discriminating between two groups of consumers (those who pre-purchase the product and the others), in the second, entrepreneurs ask for financing in exchange for a share of future profits or equity securities. Crowdfunding is also commonly divided in four different categories: debt, equity, donations or reward-based (Hollas, 2013). De Buysere et al. (2012) state that nearly half of Crowdfunding activity in Europe comes from reward based approaches, with the other half being equally disputed between donation based and equity based platforms. The USA on the other hand has a market dominated by donation based Crowdfunding platforms while, mostly due to legal constraints, equity based platforms have a symbolic reach.

The fact that many entrepreneurial ventures remain unfunded (Belleflamme et al., 2013a) may explain the rapid growth of Crowdfunding, where founders "tap" the crowd instead of specialized investors (Belleflamme et al., 2013a), allowing them to secure funds without having to seek out venture capital or other traditional sources of venture investment (Mollick, 2014). It is especially important for those who cannot manage to get financed through traditional funding sources, raising the money through a large number of supporters contributing small sums instead of resorting to one person or organization (Gerber & Hui, 2014). On the other hand, one sees the decrease in the number of angel investors that can be explained by the higher fees, fewer quality choices, longer investment horizons, certain members within a group holding more sway over others, and inefficient processes (Hollas, 2013).

Crowdfunding Platforms

Key to the development of Crowdfunding are the Crowdfunding platforms. These platforms are mostly for-profit businesses, and its value to founders increases with the number of funders, and to funders, the value of a platform increases with the number of founders and other funders (Agrawal et al., 2013). Beyond the role of an intermediary, the platforms also offer dedicated project pages, analytics and project monitoring, and tutorials prior to and throughout the campaign (Gerber & Hui, 2014). Through these online platforms, customers are provided with self-directed tools, enabling them to enjoy a more efficient process (Hollas, 2013). In sum, these Crowdfunding organizations are responsible for bringing together those who want to deliver the new initiatives using Crowdfunding mechanisms and those who may wish to support such initiatives through their investment efforts (Ordanini, Miceli, Pizzetti, & Parasuraman, 2011).

Motivations for participation

Not surprisingly, founders are strongly interested in using Crowdfunding for the anticipated purpose of raising funds (Belleflamme et al., 2013b), doing so in a democratic way (Gerber, Hui, & Kuo, 2012).

In spite of getting financing being the main reason leading founders to use Crowdfunding platforms, they are encouraged to do so even if gathering funds is not a critical issue. Creators may just be seeking to assess marketing information like pricing information, demand and demographic data for potential customers or even ways to improve their products or services design (De Buysere et al., 2012; Mollick, 2014), as well as a set of tools that can be used to create interest in these new projects in the early stages of development (Mollick, 2014). They can even be looking for different ways of getting their project noted or searching for a more direct and lasting connection to their funders (Gerber et al., 2012; Gerber & Hui, 2014). As the founders look for interacting more closely with their funders, online social networks and communities gain importance (Mollick, 2014). This connection created between the founder and the funders is an important driver for marketing, loyalty, participation and emotional attachment to the product (De Buysere et al., 2012). In sum, these authors' findings imply that founders were motivated to create Crowdfunding campaigns as it increased their awareness

through social media. Some are also looking at the potential to gain attention from the popular press (Belleflamme et al., 2013b; De Buysere et al., 2012; Gerber & Hui, 2014). The importance of public awareness in successfully gathering funds in Crowdfunding is better explained by Agrawal et al. (2011) defending that in spite of communications technologies enable entrepreneurs to access capital globally, only those with a sufficient base of online support can succeed. Nonetheless, this exposure may represent a downside for those who fear public failure, fearing losing their chances of future investments, facing public embarrassment or having their ideas stolen (Gerber & Hui, 2014).

As the importance of gaining awareness and social exposure takes an important stake in explaining the growing participation, Gerber and Hui (2014) point out that the path of growth experienced by Crowdfunding platforms may be partially due to the way in which they combine the need for financial resources with the satisfaction of people's social and cognitive needs.

On the other end of the transaction there are the funders. De Buysere, Gajda, Kleverlaan and Marom (2012) tell us that crowdfunders can expect three types of return: social, material or financial.

When searching for a social return, crowdfunders act as online philanthropists, giving in order to promote human welfare (Gerber & Hui, 2014). As a large proportion of funders seek to fund and support friends' projects, others, that are motivated to support causes (Gerber et al., 2012), showing an intrinsic motivation, consider themselves satisfied as the project gets realized (De Buysere et al., 2012). If the driver for the investment is the material return instead, the crowdfunders can be given the opportunity of pre-purchasing the product or service (Belleflamme et al., 2013b; De Buysere et al., 2012). This model is often called reward-based Crowdfunding, and the funders receive a product or service from the invested company instead of interest or dividend payments (De Buysere et al., 2012). On the other hand, if the crowdfunder is seeking for some financial return, he can opt for using loan or equity-based Crowdfunding (De Buysere et al., 2012).

Similarly to the findings regarding the satisfaction of people's social and cognitive needs, this relational dimension is also important on the investors' side. Gerber et al. (2012) suggest that funders also participate in Crowdfunding so that they can be part of a community, and they tend to engage in Crowdfunding as they observe others doing so. Crowdfunding platforms offer people the possibility to express their desire of belonging to a community by listing them as supporters (Gerber & Hui, 2014). This community building becomes particularly relevant as

it is related to the perceived trustworthiness of the investor, as its reputation is influenced by its track record (Sørheim, 2003). Sørheim (2003) also points that an orientation towards investments in geographic proximity is related to the extent to which an investor has a previous track record from a specific region, indicating that it is difficult to be an investor in a context where you do not have a track record. Additionally, some important findings by Agrawal et al. (2011) show that local and distant investors have different patterns: even though distant investors' propensity to invest is positively correlated with the founder's accumulation of capital, local investors' propensity is not.

Method and Data

The study performed was based on the baseline template database of 390 Crowdfunding platforms Prof. Villarroel provided for this research reported in Villarroel and Onofre (2013). As discussed earlier, little research exists measuring the relationship between the success of Crowdfunding platforms and openness. The original database of 390 Crowdfunding platforms was extended to include the openness characteristics subject of this study.

This original sample included Crowdfunding platforms from 40 different countries. The countries that host the largest numbers of platforms were the USA (98), the UK (27), France (21), the Netherlands (18) and Germany (15). From a preliminary analysis it was possible to see that by 2012, only 336 of those were still alive, and that in the present, only 274 are still operating.

Table 1: Evolution of the number of Crowdfunding platforms

Initial Sample (number of platforms)	390
Alive 2012	336
Alive 2014	274
Dead 2014	116

Source: Original database from Villarroel and Onofre (2013). Additional data collected in this study

Variables

To measure the degree of openness of each platform, a set of five binary variables was collected, consisting of features offered by the platforms - the availability of Google login button, Facebook login button, Facebook app, mobile applications and discussion forum.

The way in each of these features are signaling openness is defined below and summarized in Table 2.

Table 2: Openness variables description

Variable	Definition
Google login button	Sign-up for the Crowdfunding platforms through Google account
Facebook login button	Sign-up for the Crowdfunding platforms through Facebook account
Facebook App	Allows for the creation and access of Crowdfunding campaigns through Facebook
Mobile App	Allows for the creation and access of Crowdfunding campaigns through smartphones
Discussion Forum	Allows for discussion around the projects, creating a flow of ideas and knowledge exchange

Source: Data collected in this study

Social media login buttons allow people to sign-up for the Crowdfunding platforms without having to create an account. Instead, their social media (Google, Facebook, among others) accounts provide their personal information. By allowing users to login with their social media account, the Crowdfunding platform is allowing the social media platforms to search and collect data from it, and even post on your behalf. On the other hand, the Crowdfunding platform offers its users the possibility of having their projects shared, commented, and more easily spread. Offering users the chance to see what projects are people within their network backing, it can encourage the user himself to invest in it, which is clearly beneficial for the founders using the platform. For a Crowdfunding platform not to be social media connected it means that the founders are on their own and they have to create their own network to get their project known and attract investors.

The Facebook apps allow users to create and access fundraising campaigns without having to leave the Facebook website, representing an easier access to the Crowdfunding platform. Likewise, the availability of a mobile app enables users to access their account and fundraising campaigns through their smartphones. Creating an app means the platform is enabling external actors to see the code and access its content.

The discussion forum is a tool that gives crowdfunders the opportunity to pose questions and discuss around issues related to the projects, the platform, etc. This creates a flow of ideas that in turn generates a knowledge exchange. The existence of a forum allows projects founders to get feedback on their ideas, which can even be incorporated, improving the

quality of the work. Also, it makes funders feel more comfortable, making the investment decisions easier for them as they can more easily evaluate the project they are about to invest their money in.

On the other hand, to see how these features (openness indicators) were impacting the success of the platforms, I used as success measures the number of years each platform has been active, the number of Facebook fans, and web traffic indicators from Alexa Internet[1]. For this, I collected for each platform within the sample, its position in the global rank, the percentage of the global Internet users using the platform, and the distribution (in percentage) of the origin countries where the users come from.

The way in each of these indicators are measuring success is defined below and summarized in Table 3.

Table 3: Success variables description

Variable	Definition
Number of years active	The number of years a platform has been active since its foundation
Alexa's global rank	Estimate of the platform's popularity globally
Number of Facebook fans	The number of Facebook fans of the platform
Percentage of global Internet users	The percentage of the global Internet users using the platform
Number of global users	The estimate of the number of global users using the platform (based on the percentage of global Internet users of the platform)

Source: Data collected in this study

The Alexa's global rank is an estimate of the website popularity, and it is calculated using a combination of the average daily visitors to the website and the pageviews on the website over the 3 months prior to the query. The website with the highest combination of visitors and pageviews is ranked number 1[2].

[1] Alexa is a company that collects and provides data regarding web traffic, as websites global rank, local rank, the percentage of global users and the distribution of users by countries. See Appendix 3

[2,3] Source: http://www.alexa.com/

Analysis

Following the data collection, a degree (score) of openness from 0 to 5 was attributed to each platform based on the number of features they had (Google login, Facebook login, Facebook app, mobile app and discussion forum). These scores were then grouped in four categories – closed (scoring 0), low (scoring 1), medium (scoring 2) and high (scoring 3 or 4). There were no platforms scoring 5 among the analyzed sample.

Table 4: Number of Crowdfunding platforms per degree of openness

Degree of Openness	Closed	Low	Medium	High
Number of platforms	127	99	37	11

Source: data collected in this study

The data was subsequently organized in order to assess how many platforms there were in each score category in each country. All the 40 countries were then grouped into 3 big regions – Americas, Asia-Pacific and Europe – for analysis.

On a first step of the analysis, for each degree of openness was recorded the number of global users, the number of global users per platform, the average global rank, and the average number of Facebook fans.

On a second step the countries were in turn divided in three regions – Americas, Asia-Pacific and Europe. For each of the three regions, the number of platforms was recorded, as was computed the average degree of openness, the number of global users, the average global rank, and the average number of Facebook fans falling within each region.

Results

On the initial step of the analysis, the analyzed platforms were divided in four categories according to the degree of openness.

Table 5: Sample break-down by degree of openness

Degree of Openness	Closed	Low	Medium	High
degree of openness_code	0	1	2	3
Number of platforms	127	99	37	11
Avg number of years active	3,07	2,74	2,51	6,92
Global users	2168108	2846960	4317530	7401495
Global users per platform	17072	28757	116690	672863
Avg Global rank	3489712	2223061	1192884	3333466
Avg number of Facebook fans	18684	14002	298918	479258
			N	274

Source: data collected in this study

Looking at this break-down, in the sample there are 127 closed platforms, 99 with a low degree of openness, 37 with a medium, and 11 with a high degree of openness. One can conclude that the higher the degree of openness, the larger the number of people using Crowdfunding platforms globally. Additionally, and deriving from the previous statement, the number of users per platform also increases with the degree of openness. Although the closed platforms appear to be attracting a larger number of Facebook fans than the ones with a low degree of openness, for the following categories this number seems to be positively correlated with the degree of openness.

Subsequently, in order to assess the extent to which openness is adopted across different geographies, the sample was in turn divided into three regions, as shown in Table 6.

Table 6: Sample break-down by region

Region	Americas	Asia-Pacific	Europe
(region_2 number)	1	2	4
Avg degree of openness per region	1,07	0,82	0,70
Number of platforms	118	25	129
Avg number of years active	1,59	2,22	1,85
Global users	8882223	1676833	4053862
Avg Global rank	2926390	1204442	3422135
Avg number Facebook fans	10488	52459	155358
		N	272

Source: data collected in this study

For this step of the analysis it is important to note that two observations from the analyzed sample were not taken into consideration, since they were the only two Crowdfunding platforms operating in the African continent, which would not be a representative sample.

The Americas, with 118 Crowdfunding platforms, is the region with the highest average degree of openness (1.07). Follows the region of Asia-Pacific, with 25 platforms and an average degree of openness of 0.82, and Europe, with 129 platforms has the lowest degree of openness (0.70). Again, the number of users per platform increases with the degree of openness.

To better assess the real impact of openness on the performance of Crowdfunding platforms, a correlation analysis was performed (Table 7).

A non-parametric correlation was performed – the Spearman's Rho – given that the data used was not normally distributed.

Table 7: Correlations Matrix

			p_yearsactive	openness	p_globalrank	p_fbfansn	percentage_alexa global users for this platform	number_alexa global users for this platform
Spearman's rho	p_yearsactive	Correlation Coefficient	1,000	,024	-.145*	.235**	.128*	.128*
		Sig. (2-tailed)		,692	,022	,000	,043	,043
		N	274	274	250	219	248	248
	openness	Correlation Coefficient	,024	1,000	-.302**	.343**	.332**	.332**
		Sig. (2-tailed)	,692		,000	,000	,000	,000
		N	274	274	250	219	248	248
	p_globalrank	Correlation Coefficient	-.145*	-.302**	1,000	-.662**	-.996**	-.996**
		Sig. (2-tailed)	,022	,000		,000	,000	,000
		N	250	250	250	202	248	248
	p_fbfansn	Correlation Coefficient	.235**	.343**	-.662**	1,000	.667**	.667**
		Sig. (2-tailed)	,000	,000	,000		,000	,000
		N	219	219	202	219	201	201
	percentage_alexa global users for this platform	Correlation Coefficient	.128*	.332**	-.996**	.667**	1,000	1.000**
		Sig. (2-tailed)	,043	,000	,000	,000		
		N	248	248	248	201	248	248
	number_alexa global users for this platform	Correlation Coefficient	.128*	.332**	-.996**	.667**	1.000**	1,000
		Sig. (2-tailed)	,043	,000	,000	,000		
		N	248	248	248	201	248	248

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: data collected in this study

From the correlations matrix analysis, the most relevant observations are the positive correlation between the degree of openness and the number of Facebook fans (0.343), and between the degree of openness and the number of global users for the platform (0.332). The positive correlation between the number of years active and the number of Facebook fans (0.235), the number of years active and the number of global users for the platforms (0.128), are also noteworthy. From this, it is possible to observe that the performance indicators show

a higher positive correlation with the degree of openness than with the number of years a platform has been active. Additionally, it is observable a strong negative correlation between the global rank and the number of Facebook fans (-0.662) and between the global rank and the number of global users (-0.996), as well as a strong positive correlation between the number of Facebook fans and the number of global users for the platform (0.667).

Discussion

The analysis of the results presented in the previous section show that the number of users a platform is able to attract increases with the degree of openness. This statistical findings in this research are in agreement with the qualitative ideas that Chesbrough (2003) originally advocated in his work, stating that firms that look to evolve need to open up to the external environment, allowing for greater interactions with actors outside the firm.

This study looked at this question in the context of Crowdfunding (see section 2 of the Literature Review). Having a higher degree of openness in the case means having a varied set of ways of interacting with the users, concurring with the definition given by Dahlander and Gann (2010).

Although, Lakhani, Jeppesen, Lohse and Panetta (2007) argued that as knowledge is unevenly distributed in society, making innovation to rise where it is harder to access, the present study also shows that the regions where the degree of openness is lower are able to attract a lower number of users to the local platforms. This finding seem in accordance with Sørheim (2003) as it is pointed out that it is more difficult to be an investor in a context where you cannot track the investments made. The importance of openness for Crowdfunding platforms across geographies is also noteworthy, as investors present different patterns depending on the geographical proximity of their investments, as mentioned by Agrawal, Catalini and Goldfarb (2011). This author adds that, differently from the local investors, for the distant ones it is important that the investees are able to signal trustworthiness. It is shown that in a more open environment, platforms tend to create a larger community of users, enabling them to build upon their awareness and trustworthiness. This study also shows that greater openness is correlated with greater Crowdfunding platform reach, which is in line with the 'global bias' in Crowdfunding unveiled in Villarroel and Onofre (2013).

Conclusions and Future Research

Conclusion

The present dissertation aims to assess the influence of openness on the success of Crowdfunding platforms. The concept of Crowdfunding, as an open call to the crowd, for financial resources, seems to be intrinsically related to the concept of openness, as the various ways of relationship a company has with external actors (Dahlander & Gann, 2010). For this, a study was conducted analyzing a broad sample of Crowdfunding platforms worldwide, and the results indicate that openness in fact plays a part in the performance of these platforms.

From the analysis, one could conclude that although 46% of the platforms were closed, the number of users per platform increases significantly as platforms tend to a greater openness (and consequently, the total number of global users falling within each degree of openness also increases with the degree of openness). This is consistent with the findings by Agrawal, Catalini and Goldfarb (2013) as the number of funders registered in a platform increases, the value of the platform increases for both funders and founders, enhancing in this way, its growth. Further, the average number of Facebook fans for the Crowdfunding platforms tend to be bigger as the degree of openness increases. This confirms the statements of Gerber, Hui and Kuo (2012), and Gerber and Hui (2014) defending that the rapid growth of Crowdfunding is partially due to the way in which it combines financial, social and cognitive needs, and that the sense of being part of a community is an important driver for people to engage in Crowdfunding activities. Additionally, this greater openness means that the users of these platforms are also more easily tracked, which, according to Sørheim (2003) makes it easier for investors to invest as they feel they are taking less risks. Finally, it is consistent with Villarroel and Onofre (2013) who originally studied these 390 Crowdfunding platforms, finding that more global platforms are inversely proportional to the risk-level of the investment model: lower risk entails more global. By extension, more global is associated with greater openness.

As regards the regional differences, the conclusions are consistent with the previously mentioned tendency of greater openness meaning better performance for the platforms. The regions with a higher average degree of openness are the ones with a greater number of users per platform.

With this study it was possible to demonstrate the positive impact openness has on the success of Crowdfunding platforms, confirming the findings of existent literature, that by

promoting an environment of openness and information sharing it is possible to achieve greater performance.

Limitations

The study conducted for the present dissertation used an initial sample of 390 Crowdfunding platforms reported in Villarroel and Onofre (2013) from which, at the starting date, 116 were no longer operating. Being this phenomenon still in its infancy, as mentioned previously, more new platforms have been created since and it is even possible that by the end of it, some of the studied platforms ran out of business. However, these changes in the Crowdfunding market do not invalidate the results of the present study, as it mainly looks at how the operating platforms' ability to attract users increase as they tend to adopt a more open approach.

Also, not all the data collected for the analyzed sample was available for all the platforms (some Alexa's data regarding the traffic rankings and geographic distribution of the users for instance, was not available for some of them). Nonetheless, the present research was based on a large sample consisting of a broad set of Crowdfunding platforms, and by mainly using average scores it was able to capture the impact of openness on the ability of the Crowdfunding platforms to succeed.

Future Research

As future research it would be interesting to look at the impact of openness on Crowdfunding platforms through other indicators. Using a similar global sample, but looking at the restrictions imposed by the platforms regarding the geographies of both founders and funders could help building upon the findings that the more open the platform, the better its performance.

Additionally, to look at the degree of openness of different platforms, and to compare it with the degree of openness its country of origin offers, could give rise to interesting findings regarding the way Crowdfunding platforms work as a changing agent as regards the allocation of capital in those countries.

Finally, taking into consideration the dynamics identified between the present study and the previous study on the same database of Crowdfunding platforms by Villarroel and Onofre (2013), it would be useful to assess how do the openness impact the longevity of the analyzed platforms, and from there draw appropriate conclusions, applicable to future developments of this emerging way of financing.

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Appendixes

Appendix 1: List of Tables

Appendix 2: List of the 274 platforms used in the present study

1 Dollar 1 Home, 1% Club, 100 Days, 4 Just 1, 40 Billion, ACCION, ActBlue, AcumenFund, Adbacker, Africa Unsigned, Akvo, Ammado, Angel Shares, App Backr, Apps Funder, Artha Platform, Artiste Connect, Artistshare, ASSOB, Babeldoor, Babyloan, Bank to the Future, Bankeez, BBVA Friends and Family, Benfeitoria, Better Place, Better World Network, Bloom VC, Boomerang, Buy Credit, Buzz Entrepreneur, Buzzbnk, Campfire, Caring Bridge, Carnet de Mode, Cashare, Catarse, Causes, CauseVox, Changing the Present, Cine Crowd, Cinema Reloaded, Cinema Shares, Cofolio, ComeçAki, Commonbox, Comunitae, Create Jobs for USA, Creative Selector, Crowd About Now, Crowd Cube, Crowd Culture, Crowdfunder, Crowdrise, Crowdtilt, Deki, Demo Hour, Donors Choose, Dream Bank, Dreamore, Early Shares, Embolacha, Eppela, Eureka Fund, Everyday Hero, Feed The Muse, Field Theory, Finance Utile, First Giving, Fondeadora, Fondomat, Friendfund, Fund St. Louis, Fund Weaver, Fund:it, Funded By Me, Funding Circle, Fundly, Fundraise, Fundrazr, Geldvoorelklaar, Give a Little, Give Corps, Give Forward, Givezooks, Givology, Go Fund Me, Go Get Funding, Good Return, Goteo, Greater Good, Green Funder, Green Girl, Green Note, Grow VC, Helpedia, I Grin, Ideacious, Ideame, Impulso, Indie go go, Indulj, Injoinet, Inkubato, Innovestment, InVenture, Invest Fashion, Invested.In, Investiere, Investors Ally, IOU Music, Ipledg, Ise Pankur, IWN Internship Fund, Jolkona, Just Giving , Kachingle, Kapipal, Katipult, Kickstarter, Kifund, kisskissbankbank, Kiva, Kokos, Kopernik, Lainaaja, Lánzanos, Launcht, Lend With Care, Lending Club, Libros, Look at my Game, Lubbus, Maneo, Mashup Finance, Massivemov, McKenson Invest, MedGift, Mega Total, Mercy Corps, Mes Vignes, Micro Giving, Micro Ventures, Milaap, Mimoona, Mini Donations, Mobcaster, Mobile Movement, Movies Angels, Movimento 1 Euro, My Azimia, My Micro

Invest, My Projects (Cancer Research UK), My Sherpas, My Show Must Go On, My Witty Games, MYC4, Mycause, MyELEN, Myfootballclub, Namaste Direct , New Jelly, Nieuwspost, Nordstarter, Oocto, Opportunity International, Opportunity International Canada, Peerbackers, Peerform, Petridish, PIFWORLD, Pirate My Film, Plan Big, PledgeMe, PledgeMusic , Pledgie , Pling, Polak Potrafi , Poz.ycz, Pozible, PPDai , PPL, PRÊT D'UNION, Projectgeld, Prosper, Proyectanos, PUBSLUSH Press, Queremos, Querk, Rally, Rang De, Rate Setter, Razoo, Recoup, Respekt, Revenons à la musique, Revenue Trades, Rocket Hub, Rusini, Sandawe, SaveTogether, Scholar Match, SciFlies, Seedmatch, SeedQuick, Seedrs, SeedUps, SeeYourImpact, Sellaband, ShadeFund, Share a Gift, Share2Start, Sibite, Slated, Small Change Fund, Smava, SocialWish, Socios Inversores, Sokap, Solar Mosaic, SoLoCo, Somesha, SoMoLend, SonicAngel, SOUP, Spacehive, Sponsorcraft, Sponsorgoal, Sponsume, Spot.us, spredbudskabet, Sprigster, Sprowd, Start Next, Start Some Good, Starteed, StartersFund, Startup Addict, Symbid, Talentboek, TechMoola, The Modest Needs, The One Percent Foundation, The Open Source Science Project, The Wisdom of Others, ThrillCapital, TipTheWeb, Touscoprod, Trustbuddy, Uend, UJIMAA, Ulule, Unbound, Unglue.it, United Prosperity, Vakinha, Veecus, Venture Bonsai, Verkami, Vision Bakery, Vittana, Voordekunst, We fund, We komen er wel, Wemakeit, WeSayWePay, WildlifeDirect, WiSEED, Wishbox, YouCaring, Zafèn, Zidisha, Zimple Money, Zopa

Appendix 3: Number of platforms by country

Country number	Country	Number of platforms alive 2014
1	Argentina	1
2	Australia	10
3	Austria	2
4	Belgium	3
5	Brazil	8
6	Canada	9
7	Chile	1
8	China	3
9	Cyprus	1
10	Czech Republic	2
11	Denmark	3
12	Estonia	1
13	Finland	2
14	France	21
15	Germany	15
16	Hong Kong	1
17	Hungary	2
18	India	2
19	Ireland	1
20	Israel	2
21	Italy	3
22	Japan	3
23	Kenya	1
24	Latvia	0
25	Mexico	1
26	Netherlands	18
27	New Zealand	3
28	Norway	1
29	Philippines	1
30	Poland	4
31	Portugal	3
32	Romania	0
33	Russia	1
34	South Africa	0
35	Spain	11
36	Sweden	3
37	Switzerland	5
38	Uganda	1
39	UK	27
40	USA	98

Appendix 4: About Alexa.com

Alexa Internet, Inc. is a web traffic data provider. Besides the traffic data, Alexa also provides its users with ranking information about websites.

Founded in 1996, it was acquired by Amazon in 1999.

According to *alexa.com*, regarding the data, "Alexa's traffic estimates are based on data from our global traffic panel, which is a sample of millions of Internet users using one of over 25,000 different browser extensions. In addition, we gather much of our traffic data from direct sources in the form of sites that have chosen to install the Alexa script on their site and certify their metrics. However, site owners can always choose to keep their certified metrics private. Our global traffic rank is a measure of how a website is doing relative to all other sites on the web over the past 3 months. The rank is calculated using a proprietary methodology that combines a site's estimated average of daily unique visitors and its estimated number of pageviews over the past 3 months. We provide a similar country-specific ranking, which is a measurement of how a website ranks in a particular country relative to other sites over the past month."

(www.alexa.com – accessed august 18, 2014)

Figure 1: Alexa.com homepage screenshot