***ASSOCIAÇÃO DE POLITÉCNICOS DO NORTE* (APNOR)**

INSTITUTO POLITÉCNICO DE BRAGANÇA

Crowdfunding for Entrepreneurship: An Exploratory Multivariate Analysis concerning Kickstarter and Indiegogo Platforms

Shavarsh Zohrabyan

Final Dissertation presented to *Instituto Politécnico de Bragança*

To obtain the Master Degree in Management, Specialisation in Business Management

Supervisors:

Rui Pedro Lopes

Paula Odete Fernandes

Tatos Vardanyan

Bragança, May, 2016.

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Abstract

The general purpose of this work is to describe and analyse the financing phenomenon of crowdfunding and to investigate the relations among crowdfunders, project creators and crowdfunding websites. More specifically, it also intends to describe the profile differences between major crowdfunding platforms, such as Kickstarter and Indiegogo. The findings are supported by literature, gathered from different scientific research papers. In the empirical part, data about Kickstarter and Indiegogo was collected from their websites and also complemented with further data from other statistical websites.

For finding out specific information, such as satisfaction of entrepreneurs from both platforms, a satisfaction survey was applied among 200 entrepreneurs from different countries. To identify the profile of users of the Kickstarter and of the Indiegogo platforms, a multivariate analysis was performed, using a Hierarchical Clusters Analysis for each platform under study. Descriptive analysis was used for exploring information about popularity of platforms, average cost and the most popular area of projects, profile of users and future opportunities of platforms. To assess differences between groups, association between variables, and answering to the research hypothesis, an inferential analysis it was applied.

The results showed that the Kickstarter and Indiegogo are one of the most popular crowdfunding platforms. Both of them have thousands of users and they are generally satisfied. Each of them uses individual approach for crowdfunders. Despite this, they both could benefit from further improving their services. Furthermore, according the results it was possible to observe that there is a direct and positive relationship between the money needed for the projects and the money collected from the investors for the projects, per platform.

Keywords: Crowdfunding, Crowdfunding platforms, Satisfaction, Users Profile, Cluster Analysis.

Resumo

O objetivo principal do trabalho descrito neste documento é descrever e analisar o fenómeno de *crowdfunding* e investigar as relações entre os financiadores, criadores de projetos e as plataformas de *crowdfunding*. Mais especificamente, pretende-se descrever a diferença de perfil das plataformas principais, como a *Kickstarter* e *Indiegogo*. O estudo é suportado em literatura científica, recolhida por intermédio de bases de dados e indexadores de artigos científicos. Na parte empírica, os dados relativos às plataformas *Kickstarter* e *Indiegogo* foram recolhidos dos sítios web correspondentes e complementados com informação de outras fontes *online*.

Informação mais específica, relativa à satisfação dos empreendedores em ambas as plataformas, foi obtida por intermédio de um questionário, aplicado a 200 utilizadores de diferentes países. Para identificar o perfil dos utilizadores das plataformas *Kickstarter* e *Indiegogo* foi desenvolvida uma análise multivariável, especificamente a Análise de Clusters Hierárquicos. Estatística descritiva foi também gerada para explorar a informação sobre a popularidade das plataformas, o custo médio, as áreas de projeto mais populares, o perfil dos utilizadores e oportunidades futuras das plataformas. Para avaliar as diferenças entre grupos, as associações entre variáveis e dar resposta às hipóteses de investigação, foi aplicada uma análise inferencial.

Os resultados demonstram que *Kickstarter* e *Indiegogo* são das plataformas de *crowdfunding* mais populares. Ambas têm milhares de utilizadores, que se encontram geralmente satisfeitos. Cada um dos projetos segue uma perspetiva individual de financiamento. Apesar disto, ambas as plataformas podem beneficiar de algumas melhorias nos seus serviços. Adicionalmente, de acordo com os resultados, foi possível observar que há uma relação direta e positiva entre o montante necessário para os projetos e o montante recolhido dos investidores de cada projeto, para cada plataforma.

Palavras-chave: *Crowdfunding*, Plataformas de *Crowdfunding*, Satisfação, Perfil dos Utilizadores, Análise de Clusters.

Ամփոփում

Ուսումնասիրության հիմնական նպատակը քրաուդֆանդինգի ֆինանսական ֆենոմենի նկարագրումը, բացահայտումն ու վերլուծումն է, ինչպես նաև քրաունդֆանդինգ իրականացնողների, ծրագրերի հեղինակների և քրաուդֆանդինգային կայքերի միջև կապի բացահայտումը: Ուսումնասիրությունը նպատակ ունի նաև ներկայացնել պրոֆիլային տարբերությունները ամենախոշոր երկու քրաուդֆանդինգ պլատֆորմների միջև, ինչպիսիք են Կիքստարտերը և Ինդիգոգոն: Ամբողջ աշխատանքն իրականացվել է օգտագործելով զանազան գիտական գրքեր և հոդվածներ: Հաշվարկային մասում օգտագործվել են նաև տվյալներ՝ վերցված Կիքստարտերի և Ինդիգոգոի ինտերնետային կայքերից, ինչպես նաև այլ տարբեր վիճակագրական կայքերից: Ավելի մանրամասն տեղեկատվություն վեր հանելու համար, ինչպես օրինակ ձեռներեցների բավարարվածության մակարդակը երկու քրաուդֆանդինգ պլատֆորմների համար, ուղղարկվել են երկու հարյուր հարցաթերթիկներ տարբեր ձեռներեցների զանազան երկրներից: Ողջ տվյալները վերլուծվել են՝ օգտագործելով մի շարք վիճակագրական և վերլուծական գործիքներ:

Արդյունքները ցույց են տալիս, որ Կիքստարտերը և Ինդիգոգոն աշխարհում ամենահայտնի քրաուդֆանդինգային պլատֆորմներն են: Երկուսն էլ ունեն հազարավոր օգտատերեր, որոնք ընդհանուր առմամբ բավարաված են մատուցված ծառայություններից: Երկու պլատֆորմներն էլ ցուցաբերում են անհատական մոտեցում իրենց քրաունդֆանդերների համար: Չնայած դրան, երկուսն էլ կարիք ունեն բարելավելու ծառայությունների որակը, որը նրանց ուժերի սահմաններում է: Վերջնական արդյունքներից ելնելով՝ հնարավոր է դիտարկել, որ գոյություն ունի ուղղակի և դրական կապ ծրագրերն իրենց ավարտին հասցնելու համար անհրաժեշտ գումարների և ներդրողների կողմից տրամադրվող ֆինանսական միջոցների միջև:

Առանցքային բառեր՝ քրաուդֆանդինգ, քրաուդֆանդինգ պլատֆորմներ, բավարարվածություն, օգտատերի պրոֆիլ, կլաստերների վերլուծություն:

Resumen

El principal objetivo del presente trabajo de investigación es describir y analizar el fenómeno de la financiación *crowdfunding* y averiguar las relaciones entre los crowdfunders, creadores de proyectos y las plataformas de *crowdfunding*. Más específicamente, se pretende describir las diferencias de perfil entre las principales plataformas, como *Kickstarter* e *Indiegogo*. Todo el estudio está apoyado en la literatura científica que existe sobre la tematica. En la parte empírica, se recogieron datos sobre las plataformas *Kickstarter* e *Indiegogo* en sus sitios web y también se complementó la información con otras fuentes *online*.

Para encontrar información específica, como la satisfacción de los empresarios de ambas plataformas, se aplicó una encuesta de satisfacción a 200 empresarios de diferentes países. Para identificar el perfil de los usuarios de las plataformas *Kickstarter* e *Indiegogo*, se realizó un análisis multivariado, a saber un Análisis Jerárquico de Clúster para cada plataforma en estudio. Se efectuó un análisis descriptivo exploratorio para intentar conocer la popularidad de las plataformas, el coste medio y el área más popular de los proyectos, el perfil de los usuarios y las oportunidades futuras de plataformas. Para evaluar las diferencias entre los grupos, asociación entre variables, y que respondan a las hipótesis de investigación, se aplicó un análisis inferencial.

Los resultados mostraron que las *Kickstarter* e *Indiegogo* son de las plataformas de *crowdfunding* más populares. Ambas tienen miles de usuarios y están en general satisfechos. Cada uno de los proyectos sigue un enfoque individual de financiación. Aunque, ambas las plataformas podrían beneficiarse de la mejora en sus servicios. Además, según los resultados fue posible observar que existe una relación directa y positiva entre el dinero necesario para los proyectos y el dinero recogido de los inversores para los proyectos.

Palabras clave: *Crowdfunding*, Plataformas de *crowdfunding*, Satisfacción, Perfil de Usuarios, Análisis de Clúster.

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Acronyms

CFP - Crowd Funding Platforms

H - Hypothesis

IBM - International Business Machines

IPO - Initial Public Offering

P2P - Pert to Peer

SO - Specific Objectives

SPSS - Statistical Package for the Social Sciences

UK - United Kingdom

USA - United States of America

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Introduction

In modern times, entrepreneurs and project creators who want to create, improve and support their businesses have the possibility to rely on venture capital, retained earnings, loans from banks and other financial institutions for funding their ideas. However, all of these alternatives can pose some difficulties and issues for entrepreneurship, especially for small and micro-businesses. Usually, they search for sources of alternative funding, which would help them to proceed with their projects with a reduced possibility of financial liabilities. One of the best examples is crowdfunding. It is a relatively new phenomenon for entrepreneurship and is becoming more popular and useful for project creators. It can help entrepreneurs to find investors for their projects all over the world because crowdfunding is not limited to a specific geographical region. The principle is supported by a world-wide network that can connect entrepreneurs and investors from everywhere. All crowdfunding processes are implemented on crowdfunding websites (platforms), which usually include high level of business flexibility. The work described in this thesis presents and analyses the funding phenomenon of crowdfunding and investigates the relation among crowdfunders, project creators and crowdfunding websites. Also it finds out profile differences between major crowdfunding platforms, such as Kickstarter and Indiegogo. In this sense the main objective of study is to identify the overall profile differences between major crowdfunding platforms (Kickstarter and Indiegogo).

As crowdfunding is a relatively new phenomenon, it is no surprising that the literature specifically devoted to crowdfunding is new and there are less number of scientific papers. The literature review tries to provide a complete description of the main scientific papers, with special emphasis on the importance and role of crowdfunding for entrepreneurship, the most important and popular crowdfunding models, such as donation-based, reward-based, lending-based and equity-based crowdfunding models. It also presents financial intermediation theory and determinants of success.

In the empirical part, the thesis describes the data analysis regarding satisfaction with two big crowdfunding platforms: Kickstarter and Indiegogo. Necessary data is collected on the crowdfunding websites and on other statistical websites, which includes information about platforms, entrepreneurs, projects, investments and other. This information is complemented with data collected through a survey to assess the satisfaction with crowdfunding platforms and their services. The survey includes key questions about Kickstarter and Indiegogo, including issues about popularity, efficiency, most useful

crowdfunding areas, advantages and disadvantages of the platform. It also allows getting information about time and money, important for starting a crowdfunding project. All this information helps to understand future opportunities and expectations for Kickstarter and Indiegogo. There are 62 applied questionnaires from Kickstarter and 78 from Indiegogo.

In this regard, to answer to the objective of the study and the research hypotheses it will apply a cluster analysis to identify the profile of users of the Kickstarter and of the Indiegogo platform, descriptive analysis to know and explore the information about popularity of platforms, average cost and the most popular area of projects, profile of users and future opportunities of platforms, the inferential analysis will be using to answer to the researches hypothesis. For complete and concise presentation of the final results, different tables, figures, diagrams and detail descriptions are used. All the results are summarised in the conclusion part of master thesis, which presents the most important findings of this work.

1. Literature Review

1.1. Definition of crowdfunding

Every small business owner and entrepreneur wants to build, grow, and support his business. For that they need capital, which is not easy to grow by their own means and that usually rely on alternative ways to gather. The usual sources of business funding, such as bank lending, venture capital, retained earnings, are difficult to obtain for small and micro-businesses Entrepreneurs who lack the personal resources needed to finance their businesses turn to family members or friends, sometimes to personal acquaintances, but those sources are frequently insufficient. As a result, many small businesses, that are able to be potentially successful do not get funded (Bradford, 2012). Financial sources can be generally divided into two main categories: equity and debt. There are different types for entrepreneurial finance investors (Table 1).

Table 1. Different types of entrepreneurial investors.

Investors of equity financial source	**Investors of debt financial source**
Entrepreneurs and team members	Banks
Friends and family	Leasing companies
Business angels	Government agencies
Venture capitalists	Customers/suppliers
Other companies/strategic investors	Bootstrapping
Stock markets	

Source: Adapted from Schwienbacher and Larralde (2010, p.9).

Nowadays the most efficient form of alternative capital is crowdfunding. This is one of several options available to entrepreneurs who are looking to fund their new or working businesses. Crowdfunding is a

contemporary way of source founding for new projects, businesses or ideas. For entrepreneurs crowdfunding can be very effective way to bridge the hole between the earliest stages of funding and later growth capital. Although it seems a perfect fit to the objectives, it should not be considered as a complete replacement to all traditional channels of funding. In several cases, there is an overlap, but crowdfunding is best used as a tool to supplement the more traditional funding methods (Husain, & Root, 2015). According to Agrawal, Catalini & Goldfarb (2011, p.4) "*Crowdfunding systems enable users to make investments in various types of projects and ventures, often in small amounts, outside of a regulated exchange, using online social media platforms that facilitate direct interaction between investors as well as with the individual(s) raising funds"*. Entrepreneurs can develop their new professional connections with other entrepreneurs through sharing their crowdfunding work (Muller, Leitão & Sikor, 2013).

Although crowdfunding is a relatively new phenomenon and the related literature is only nascent, crowdfunding has been studied by different researchers and approached in popular papers all over the word. According by Belleflamme, Lambert and Schwienbacher (2013) mostly cited by coequal researchers, when it comes to define academically crowdfunding. They state crowdfunding as being a practice that *"Involves an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for the future product or some form of reward to support initiatives for specific purposes"* (Belleflamme, Lambert & Schwienbacher, 2013, p 4). The use of the Internet to make "open call" can have a very high level of efficiency for crowdsourcing in general, but it can also become problematic, chiefly when it includes the offering of equity to the crowd (Belleflamme, Lambert & Schwienbacher, 2012).

According to the definition of Steinberg and De Maria (2012, p.2) *"Crowdfunding is the process of asking the general public for donations that provide start-up capital for new* ventures", Wicks (2012, p.5) considers that *"Crowdfunding is where a large number of people (a crowd) financially support a project by giving a relatively small amount of money either in return for a reward, as a donation, or potentially in return for equity. It is a form of social networking and uses the power of the Internet and online communities to spread the word about a project or product"*.

1.2. Crowdfunding models

It is possible to represent crowdfunding like a new way for project organizers, entrepreneurs, and start-ups to raise money for their purposes. Alleviated by the spread of online technologies (and specifically, social media), crowdfunding capitalizes on the many-to-many form of communication that has already opened up new opportunities in industries from ecommerce (e.g., EBay) to accommodation and travel (e.g., Airbnb, Uber). During the last five years the size of crowdfunding market has raised about 23 times (from $1.5b to $34.4 b) (Husain & Root, 2015). Overall a distinction can be made between the following

four main crowdfunding models (Collins & Pierrakis, 2012; Cornell, 2014; Gajda &Mason, 2013; Mitra, 2012; Steinberg, DeMaria & Kimmich, 2012; Husain & Root, 2015):

1. **Donation-based crowdfunding**
2. **Reward-based crowdfunding**
3. **Lending-based crowdfunding**
4. **Equity-based crowdfunding**

Generally, the funding processes on most crowdfunding platforms are similar, regardless of the type of crowdfunding used. The main purpose of crowdfunding platforms is the simplification of processes of transactions through their knowledge (Martinez-Canas, Rubio & Ruiz-Palomino, 2012). The funding processes begin with a fundraiser initiating a request for funding. Potential investors can examine the offers, and, when it is interesting for them, invest a small amount toward the target amount.

Crowdfunding offers platforms where entrepreneurs have possibilities to display their work to a global community (Gerber & Hui, 2013). Actually, crowdfunding can be used as a manner to help entrepreneurs reach new business market that they could not access offline (Agrawal, Catalini & Goldfarb, 2011). Online platforms are the intermediary places for crowdfunding activities, where entrepreneurs and crowdfunders have possibilities to exchange a particular value for money. These platforms have a few opportunities to be specialized to certain kinds of projects and inhere two eminent roles of users (Hardy, 2013). The act of participating on crowdfunding platforms can improve user's feelings of self-efficacy around their ability to perform and contribute (Kollock, 1999). Participation in social networks, such as Facebook or Twitter, has also been shown to heighten user self-efficacy. A few users go on Facebook to find greater purposes, to receive social support, to sense less uncertainty about oneself or to find a great feelings of self-efficacy (Gangadharbatla, 2008). All business models of crowdfunding platforms are generally based on payments that are charged for each project that is sought to be funded. Frequently, crowdfunding sites charge when there is successful financing. Otherwise, when fundraising is not successful, entrepreneurs pay no fee. A very good and popular example of a site[1] that charges fees in this manner is Kickstarter (Mitra, 2012).

It is really important to understand the effect of crowdfunding on entrepreneurial self-efficacy. It has a relatively long story (Shea & Bidjerano, 2010). It describes the belief one has in their ability to succeed at tasks critical for entrepreneurship (Bandura, 1997). Entrepreneurial self-efficacy positively influences as well as the targets of entrepreneurs set. Self-efficacy has a power for significant influence on entrepreneurial intentions and performance. Entrepreneurs need to have self-efficacy, if they want to pursue new ventures and believe in their own abilities (Chen, Greene, & Crick, 1998). The high level of success and motivation of entrepreneurs makes higher levels of self-efficacy (Shane, 2003).

[1] See at http://www.kickstarter.com/

Crowdfunding provides a specific way to study entrepreneurial self-efficacy given its role as a space for entrepreneurs (Harburg et al., 2015). The self-efficacy can strongly influence on entrepreneurial intentions and performance. The entrepreneurs who do not have self-efficacy is unlikely to pursue new ventures and believe in their own abilities (Chen, Greene & Crick, 1998). The theory of Bandura's Social Cognitive suggests that there are four ways for developing of self-efficacy (Bandura, 1997):

- **Experience of mastery**, which is seeing oneself if succeed at tasks;
- **Modelling,** which is seeing examples of similar others succeeding at tasks;
- **Social persuasion**, which is getting feedback and encouragement from others;
- **Physiological states**, which are physical and emotional response to various situations;

The findings in the study of Schwienbacher and Larralde (2010) suggest different successful opportunities for for-profit and non-profit organizations. The non-profit organizations have more opportunities to raise the money through crowdfunding and tend to be more successful in achieving their fundraising targets and purposes as compared to for-profit organizations and project-based initiatives. The non-profit organizations may be more prone to commit to qualified products or services if quality comes at the expense of quantity.

1.2.1 Donation-based crowdfunding

This type of crowdfunding assumes individuals to send money to projects or people in need, with no assumptions of a palpable perk in exchange for their money (Husain & Root, 2015). The investments on donation sites are, as the name would indicate, donations. It allows fundraisers, primarily from social and cultural groups, creative enterprises and community-based organizations to directly make an online appeal for donations (Baeck, Collins & Zhang, 2014). According Baeck, Collins and Zhang (2014, p.85) *"Donation-based crowdfunding is a process, when Individuals donate small amounts to meet the larger funding aim of a specific charitable project while receiving no financial or material return in exchange".* Donation-based crowdfunding plays an essential role in the alternative finance processes.

The most popular donation-based crowdfunding sites are Kickstarter and Indiegogo. Due to these platforms people and creative projects are able to have an opportunity for raising their money via online donations or pre-purchasing of products or experiences. These two crowdfunding platforms only support donation-based projects. Each of them does not allow contributors to be as an investor or a shareholder, and does not qualify contributors as accredited investors to participate in any financial returns. On the Kickstarter and Indiegogo crowdfunding platforms the creators of project maintain hundred percent control over their products and services (www.forbes.com). Crowdfunding platforms are one of the interfaces between entrepreneurs and founders (Song & Boeschoten, 2015). Using donation-based crowdfunding fundraisers, mostly from social and cultural groups, creative entrepreneurs and

community-based organisations are able to directly make an online protest for donations (Baeck, Collins & Zhang, 2014). In 2015, start-ups worldwide raised U.S. $2.85 billion through donation-based crowdfunding platforms (Barnett, 2015). The following figure presents the growth of donation-based crowdfunding platform in the last five years.

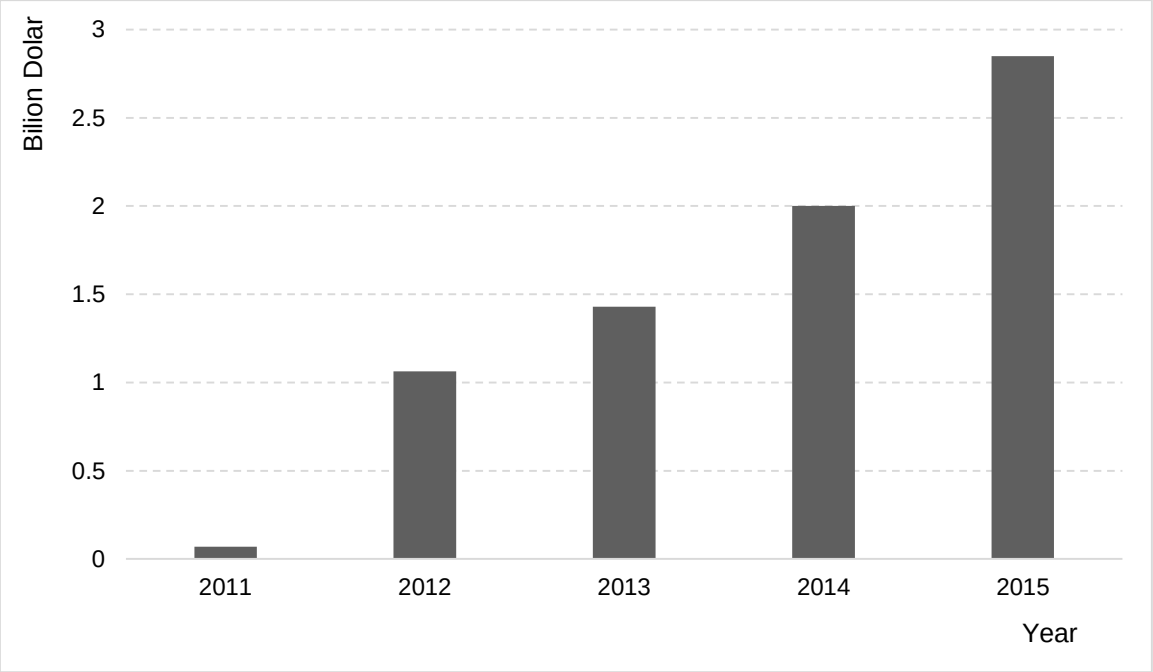

Figure 1. Growth of Donation-based Crowdfunding Platform.

Source: Source: Husain and Root (2015, p.5); Gajda and Mason (2013, p.5-6); Wareham (2015); SH (2016); Barnett (2015).

Donation-based crowdfunding platform is perfect environment for those who want to gather a community online and to enable them to donate money for social or charitable projects. It can help small organizations and people to raise money for personal or specific charitable purposes. Motivation of funders for this crowdfunding platform expressed as intrinsic and social and benefits are intangible (Nesta Operating Company, 2012). For charities and personal campaigns donation-based crowdfunding is the best choice. But that does not mean that this model cannot be used for startups. This model can be effective for social entrepreneurs who are running projects that may be attractive to those interested about that specific issue (Husain & Root, 2015). Donation-based crowdfunding platform represents a small proportion of overall crowdfunding activities (Mitra, 2012). For more and certain information please see Figure 5. Two examples of donation-based crowdfunding platform are:

1. **GlobalGiving.org,** which is an example of a pure donation site. This site is limited to non-profit organizations (Bradford, 2012). This is the first and largest global crowdfunding community, connecting non-profits, donors and companies in various countries all over the world. It has made the possibility for local organizations to have an access for funding, tools, training. Its support them to become more efficient and make world a better place (https://www.globalgiving.org/).

2. **EpicStep.com,** which as a donation-based platform for financing billboards. It is the place to go to create and support campaigns. WikiLeaks billboard campaign, which is in Los Angeles, is very popular successful initiatives of EpicStep.com donation-based platform. It has really received good publicity in the media (Mitra, 2012).

Donation-based crowdfunding sites are not suggesting securities to investors. Contributors clearly have no anticipation of profits, because they receive absolutely nothing in return for their contributions. So they only have possibilities for stock or notes and it is not wright to consider this contributions as a securities (Bradford, 2012).

1.2.2. Reward-based crowdfunding

This king of crowdfunding model channels money to creatives or entrepreneurs who guarantee sending a reward in exchange for the money. Generally, this model is used to collect pre-orders for innovative products (Husain & Root, 2015). Individuals donate to a specific project with the anticipation of receiving a palpable (but non-financial) reward or product at a later date in exchange for their investment (Baeck, Collins & Zhang, 2014). According to Baeck, Collins and Zhang (2014, p.71) *"Reward-based crowdfunding is a process, when Individuals donate towards a specific project with the expectation of receiving a tangible (but non-financial) reward or product at a later date in exchange for their contribution"*. It is a model that has really attracted the imagination of public and attention of media. Reward-based crowdfunding is the type of alternative finance that registered the highest usage rate in consumer poll among all examined models (Baeck, Collins & Zhang, 2014). In 2015, start-ups worldwide raised U.S. $2.68 billion through reward-based crowdfunding platforms (Barnett, 2015). Figure 2 presents the growth of reward-based crowdfunding platform in the last five years.

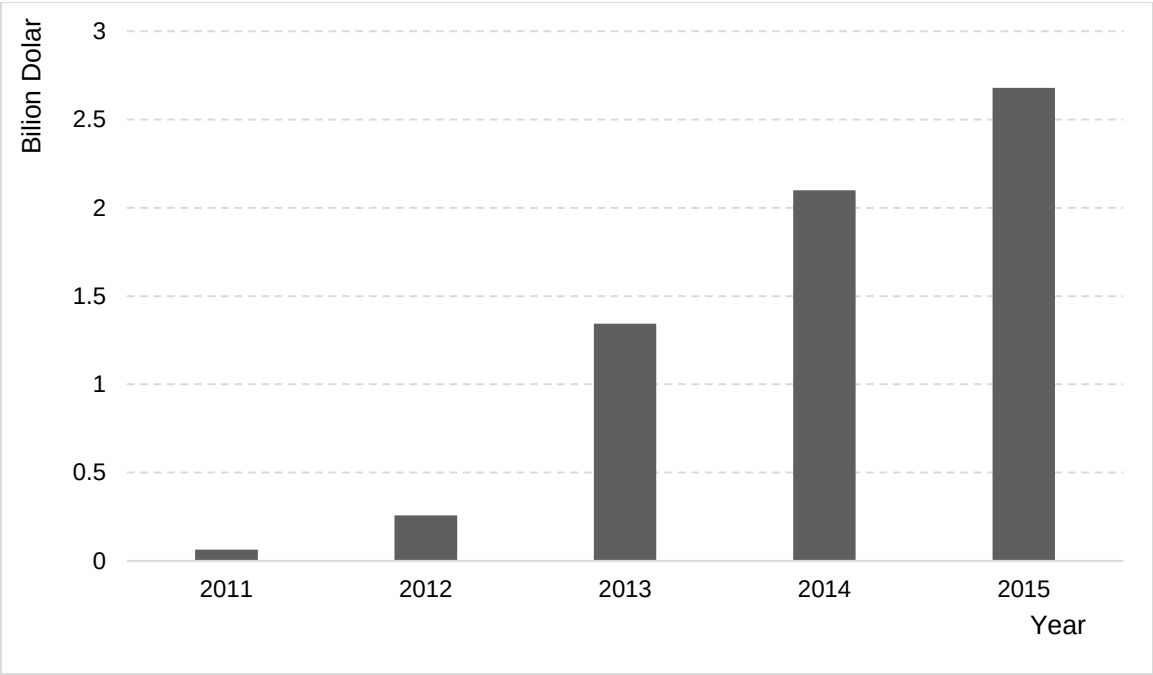

Figure 2. Growth of Reward-based Crowdfunding Platform.

Source: Source: Husain and Root (2015, p.5); Gajda and Mason (2013, p.5-6); Wareham (2015); SH (2016); Barnett (2015).

For many types of start-ups in various stages of development, the campaigns of reward-based crowdfunding are quite advisable and convenient. They can work efficiently specially for start-ups that are able to promise the end product in return for the contribution. Normally, entrepreneurs have at least a working prototype to show the potential investors before they can turn to crowdfunding, using the investments raised via pre-orders to fund the earliest production run (Husain & Root, 2015). The reward-based crowdfunding sites normally do not include direct revenue sharing arrangements through. A very good examples are payment of interest and profit-sharing from the business. Nevertheless, they could offer different categories of rewards. It depends from the amount of contribution (Mitra, 2012).

The reward-based crowdfunding model is very similar to the pre-purchase model. Frequently, these two models appear together on the same sites. The most useful and popular reward/pre-purchase crowdfunding sites are Kickstarter and Indiegogo (Bradford, 2012). Kickstarter is one of the most popular crowdfunding sites in the world. There are many numerous reasons for Kickstarter's popularity. For instance, it does not limit the character of the featured projects. As a result, Kickstarter has different types of audience, providing an elastic approach when it comes to price and rewarding schemes. Kickstarter is also very appealing to project developers, contributors and scientific community. The reason is the multiplicity of the rewarding schemes that may be suggested by the project manager (Hardy, 2013).

Kickstarter requires its projects to propose rewards, which are not limited to pre-purchase and typically items produced by the projects itself. Unlike Kickstarter, Indiegogo does not require campaigns to offer perks, but it recommends them. Few perks offered on the Indiegogo site follow the pre-purchase model, but it is not mandatory. So, it is possible to conclude that Kickstarter uses "all-or-nothing" funding model, which means that projects are not able to be founded unless they reach their stated funding goal, but Indiegogo prefer to be more flexible and give more chance to entrepreneurs (Bradford, 2012).

Considering the main differences between Kickstarter and Indiegogo in relation with their business model, fee, payment, blog and data statistics, category, prohibition, partnership and restraint it is possible to present some features. Kickstarter follows an *"all or nothing"* business model, which Indiegogo also uses, but Indiegogo also adopts *"keep it all"* too. For Kickstarter the price of fully-funded is 5%, which means that Kickstarter will take 5% of the funds for successful projects and it has credit card processing fee by Amazon 3-5%. Indiegogo has 4% of fully-funded price (successful campaigns and projects) or 9% of partially-funded price (unsuccessful campaigns and projects). It also has 3% fee for credit card processing and $25 wire fee for projects and campaigns that are not from United States[2]. Kickstarter accepts payments by using credit cards, Indiegogo accepts payments by using PayPal online money transfer system. Both are able to have blog, but here there are differences related with data releasing. Kickstarter has data release and Indiegogo does not have systematic data release. Generally, there 13 main categories and 36 subcategories in the Kickstarter crowdfunding platform and 3 main categories and 24 subcategories in the Indiegogo crowdfunding platform. Indiegogo does not have any prohibitions, but Kickstarter has 3 prohibitions:

1. Charity or cause funding projects;
2. 'Fund my life' projects;
3. Other prohibited contents.

This types of projects are not allowed to be raised in Kickstarter. So, for this projects more efficient and expedient way is the using of Indiegogo crowdfunding platform (Zhang, 2012).

1.2.3. Lending-based crowdfunding

This type of crowdfunding is sometimes also known as debt-based crowdfunding or peer to peer lending. Lending-based crowdfunding allows individuals to lend money to other individuals or companies, in return for regular (and agreed-upon) interest payments (Husain & Root, 2015). Project possessors typically recommend to return funds to backers over a specified time period and with benefit (although in some cases without profit) (Betting, 2016). In the lending-based crowdfunding model, multiple funders lend smaller amount of money through online platforms with the expectation of periodic repayment

[2] See at http://www.indiegogo.com/learn/pricing.

(Segal, 2015). In 2015, start-ups worldwide raised U.S. $25.1 billion through lending-based crowdfunding platforms (Barnett, 2015). Figure 3 presents the growth of lending-bases crowdfunding platform in the last five years.

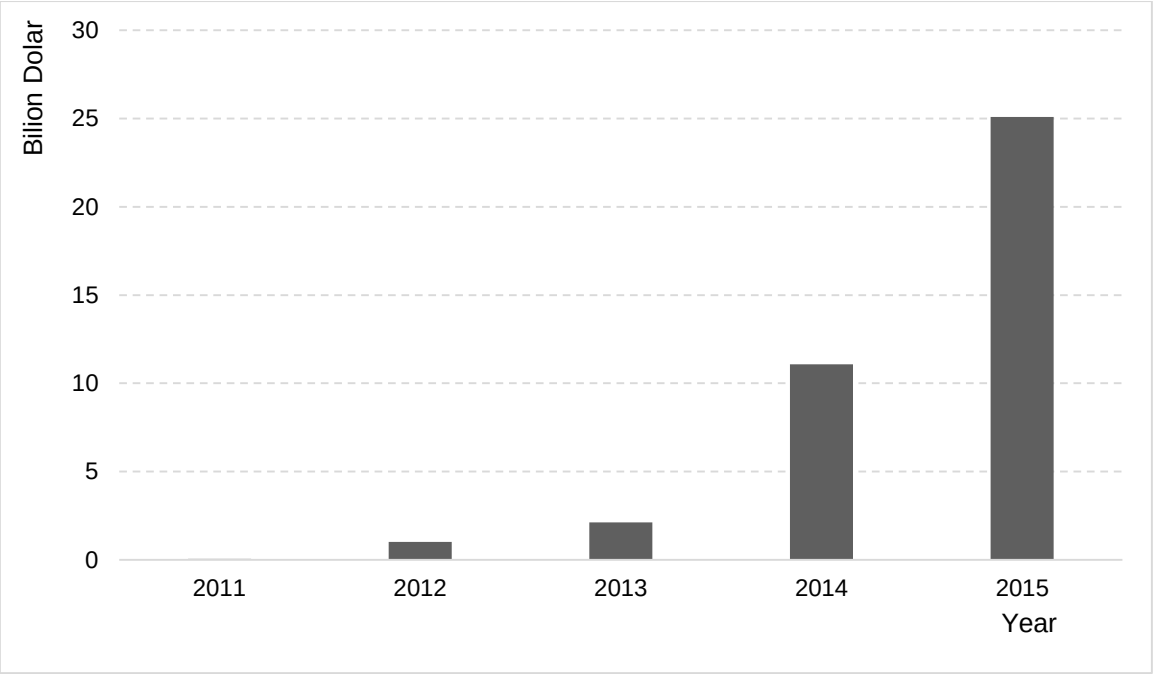

Figure 3. Growth of Lending-based Crowdfunding Platform.

Source: Source: Husain and Root (2015, p.5); Gajda and Mason (2013, p.5-6); Wareham (2015); SH (2016); Barnett (2015).

There are two types of Lending-based crowdfunding sites:

1. **Sites not offering interest.** The famous one is Kiva, which is the leading crowdfunding site that uses the lending model. Kiva lend to entrepreneurs indirectly, through his microfinance partner lenders around the world. Kiva calls this process "field partners". Usually the local institutions make loans to entrepreneurs before the loan request is even posted on the Kiva web site. The lenders often browse the Kiva's requests and fund each one in any amount from $25 to the loan's full amount. Kiva gathers and distributes this funds back to the field partners and credit lenders with any repayments the entrepreneurs make. Every lender of the Kiva web site receives his principal back only. For covering their operating costs, the field partners use any interest received (Bradford, 2012);
2. **Sites Offering Interest.** There are two huge lending sites that offer interest: Prosper and Lending Club. Sometimes the loans on these sites are not for business purposes. A few

loans are for personal expenses, but it is growing up the amount of the small business lending on these sites. They both operate on similar, but not identical, platforms. If there are opportunities for comparing the nature of investors' participation, it is possible to say that it has changed. Nowadays the lenders on the two sites make indirectly loans to the underlying borrowers (Bradford, 2012).

Lending-based crowdfunding has possibilities for direct borrowing of funds, skipping a few traditional financial institutions, such as banks. This type of crowdfunding is a development of the peer-to-peer (P2P) model of lending, pioneered by firms such as Landingclub and Zopa. It is possible to distinguish two approaches:

1. **Microfinance (P2P microfinance).** Peer-to-business resembles micro-financing so projects and businesses seeking debt apply through the platform uploading their pitch, with members of the crowd taking small chunks of the overall loan. Micro-lending solution is a financial aid usually used by the poorest, offered in small amounts, collected and distributed by non-profit and social focused platforms (Pazowski & Czudec, 2014);
2. **Social lending (P2P lending),** which is operates as an investment. The free funds are appropriated and lent to certain rules. Payment with interest can be returned in a lump sum or along some sort of payment schedule (Gulati, 2014).

The form of contribution for lending-based crowdfunding is loan. Concerning the form of return, it is possible to say that the repayment of the loan with interest and a few socially motivated lending in interest free (Pazowski & Czudec, 2014). Peer-to-peer lending might be a viable financing alternative for entrepreneurs who want to start a small business, especially given the post-recession market. By using P2P lending, it is possible to raise capital by the Internet. We can present P2P lending as a hybrid crowdfunding and market place lending, which is a term used for describing online platforms that stand between borrows and lenders. It also encompasses P2P lending, as well as online lending by large institutions, (Segal, 2015). P2P lending offers various potential benefits and drawbacks for borrowers and lenders. On the positive side, it might serve credit needs in markets where financial institutions would not lend by using traditional methods (PricewaterhouseCoopers, 2015). On the negative side, P2P loans compared with traditional bank loans tend to carry higher interest rates. The Lending Club and Prosper, which are very popular lending platforms, recommend that lenders diversify across loans (Segal, 2015).

1.2.4. Equity-based crowdfunding

The fourth type of crowdfunding assumes individuals to purchase equity in a company, with the possibility of that company making an exit (typically, and IPO[3] or acquisition), leading to a financial return (Husain,

[3] Initial Public Offering.

& Root, 2015). Equity-based crowdfunding could create an efficient alternative for small businesses and microbusinesses which are not able to ripen their covet level of credit in an environment where the amount of small business loans being made available is shrinking (Taylor, 2015). In the last five years, the equity branch of crowdfunding has become a more and more important financing alternative for start-ups, and volume has doubled every year since 2011. In 2015 (Figure 4), start-ups worldwide raised U.S. $2.56 billion through equity-based crowdfunding platforms (Barnett, 2015).

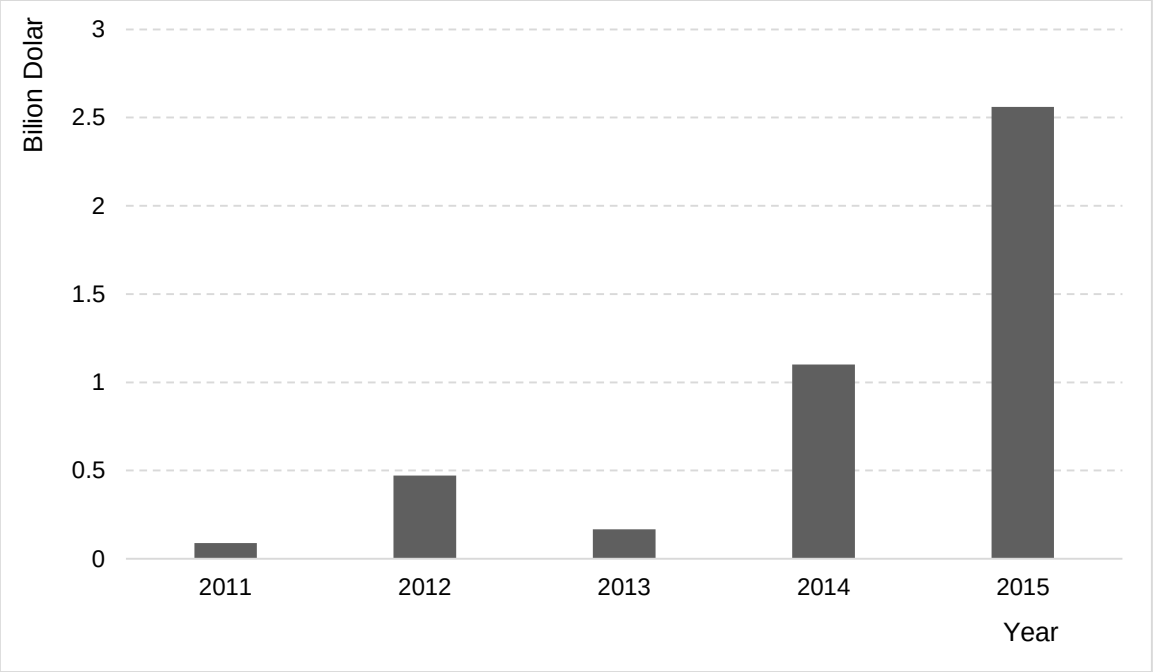

Figure 4. Growth of Equity-based Crowdfunding Platform.

Source: Source: Husain and Root (2015, p.5); Gajda and Mason (2013, p.5-6); Wareham (2015); SH (2016); Barnett (2015).

Equity investment compared with loans sometimes can be more desirable source of funding. The monthly repayments of loan can have negative effect on growth. Equity-based crowdfunding has a similarity with reward-based crowdfunding: entrepreneurs have to be flexible and comfortable with opening up their businesses to scrutiny, which is greater for campaigns of equity-based crowdfunding, as investors will want to see business plans and cash flows to date, along with other sensitive information (Husain & Root, 2015).

Equity-based crowdfunding is more efficient and preferable than traditional methods of debt-based funding for several important reasons:

a) Unlike typical bank loan equity-based crowdfunding does not ask collateral to receive funds

b) As equity-based crowdfunding does not assume any initial liabilities it does not have any reasons to increase chances of experiencing bankruptcy and payback is ongoing as a share of future revenues

c) Unlike debt-based funding, where bankruptcy may have to be declared in the case of a failed business venture for equity-based crowdfunding no one of investment does not need to be repaid if the business fails (Taylor, 2015).

The market of equity-based crowdfunding is essentially influenced by the legislative environment of its country. Besides, equity-based crowdfunding includes the sale of a security and it has been restrained until now in the U.S., the U.K., Ireland, France, etc. (Bradford, 2012).

There are a lot of equity-based crowdfunding sites, which can be very useful, profitable and efficient for entrepreneurs and investors. Crowdfunder is very good and famous example for equity-based crowdfunding. The average size of equity projects is $1.6 million. *"Crowdfunder is the leading equity crowdfunding platform, based in Los Angeles, CA. The Crowdfunding industry is doubling year over year with $35B+ projected to be funded online by 2016, and we're excited to be a leader in equity crowdfunding at the forefront of this burgeoning market. We believe entrepreneurship to be one of the most powerful forces for economic and societal change in our time. Through access to capital and education, we empower thousands of entrepreneurs to grow high-impact ventures*" (https://www.crowdfunder.com).

1.3. International and geographical data about crowdfunding models and platforms

As already mentioned, crowdfunding has four main models. All models have differently grown and it is really important to find out growing history for each platform. It will help to find out popularity and efficiency for four main crowdfunding models.

Figure 5 presents the growth of crowdfunding platforms during the last five years. The results in the figure show, that during the last five years all crowdfunding models have grown, but here it is clearly seen that the growing level of lending-based crowdfunding model is quite different. At the end of 2015 it had about 3 times more funding than the other three crowdfunding models together.

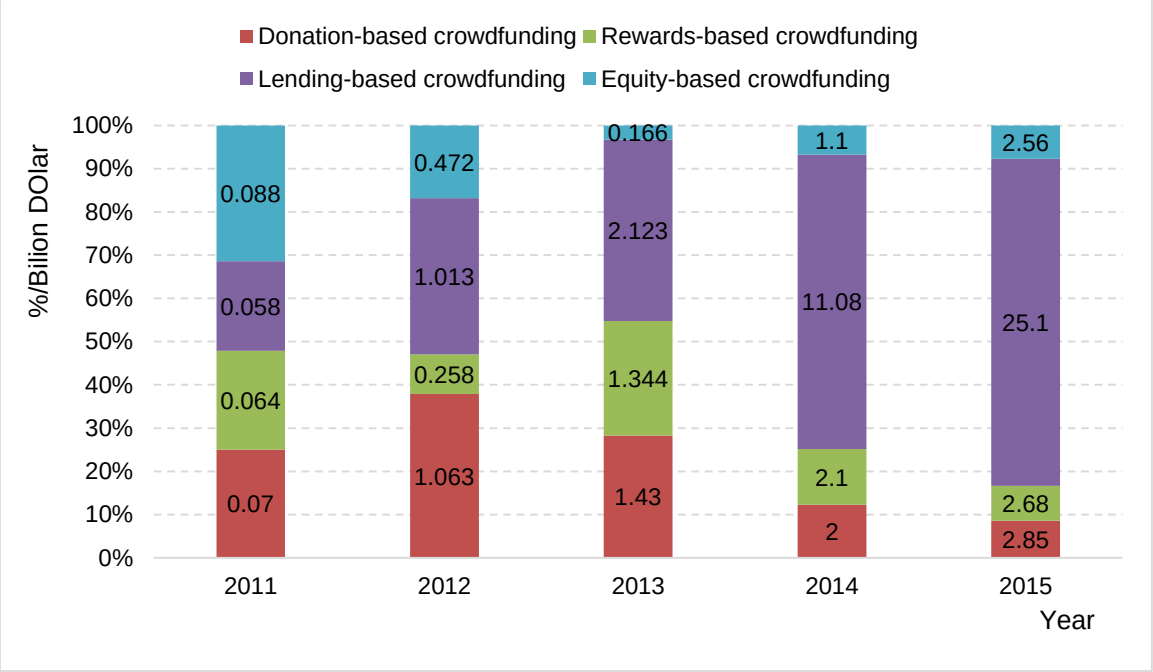

Figure 5. Growth of Crowd Funding Platforms (CFP).

Source: Husain and Root (2015, p.5); Gajda and Mason (2013, p.5-6); Wareham (2015); SH (2016); Barnett (2015).

Another important indicator is the geographical distribution of alternative finance in the world. It can help to find countries, where crowdfunding is popular and important part of entrepreneurial activities. The researchers of Cambridge University have found this geographical information for European countries and have presented this information in Figure 6.

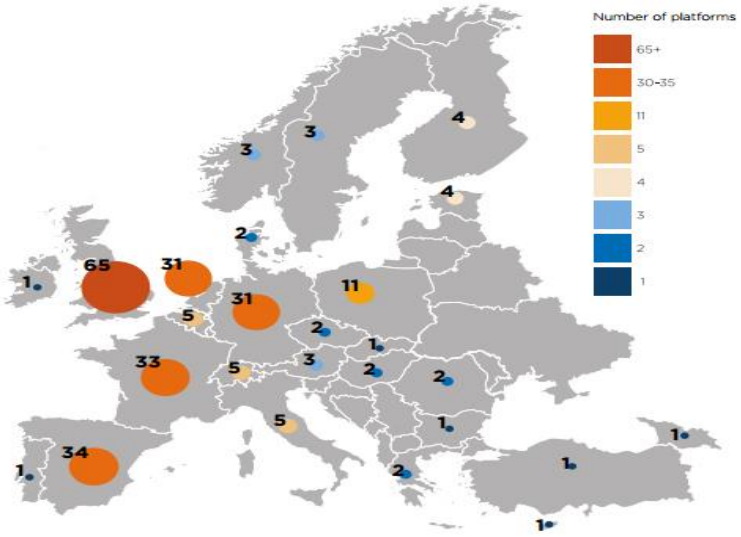

Figure 6. The geographical distribution of surveyed alternative finance platforms in Europe by country.

Source: Wardrop, Zhang, Rau and Gray (2015, p.14).

Most of the crowdfunding platforms are installed in the United Kingdom, which has 65 platforms for alternative financing. Also, there are four countries, such as Spain, France, Germany and The Netherlands, which have more than 30 crowdfunding platforms. Portugal and Armenia have the lowest number of platforms: 1 platform each of them.

It is really important to have information about geographical distribution of crowdfunding projects for Kickstarter and Indiegogo. It can be useful information for comparing process of both platforms. It would more clearly define the key issues of the thesis. But it is too much difficult, because there is an issue related with Indiegogo. This crowdfunding platform does not have open information for researchers to sport their scientific work. For that reason, it is possible to present useful data from internet resources only about Kickstarter. For the goal of the thesis related with compering these two crowdfunding platforms it has done survey with entrepreneurs and the results are presented in the methodology part. It helps to have some general and useful data about Kickstarter and Indiegogo. The following figure presents countries that have the highest number of projects on the Kickstarter crowdfunding platform. It also includes the number of projects on the Kickstarter for Armenia and Portugal.

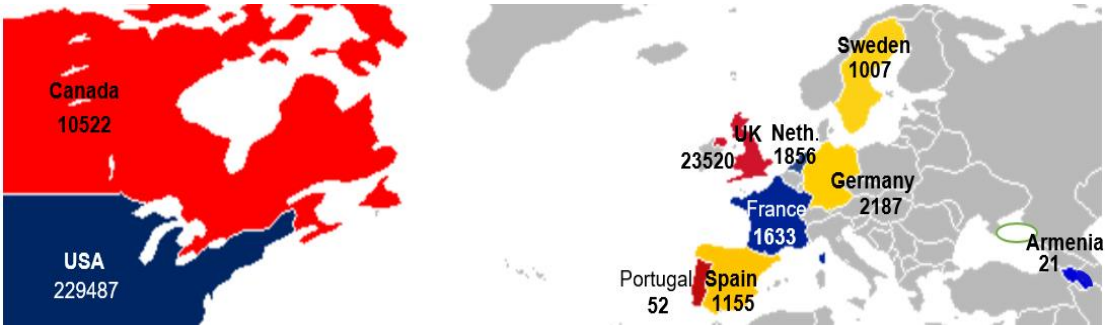

Figure 7. The geographical distribution of crowdfunding projects of Kickstarter platforms by country.
Source: https://www.kickstarter.com[4].

The results of the figure show, that Kickstarter has the highest number of projects in USA, followed by UK and Canada. Armenia and Portugal have really small number of crowdfunding projects on the Kickstarter.

1.4. Financial intermediation theory

The financial intermediation theory shows all details of the exchange relationships and crowdfunding intermediation's functionalities. Financial intermediaries are widespread institutions of economies. They are also pivotal in the saving-investment process, where are lending capital of financial intermediaries,

[4] The date of this data is 19.04.2016.

acquired from numerous capital-giving agents, to a lot of capital-seeking agents by using debt contracts for both of them (Gorton & Winton, 2003). Capital-giving agents has a few possibilities of return based on the amount and type of their initial investments (Figure 8).

Figure 8. Financial Intermediation.

Source: Haas, Blohm and Leimeister (2014, p.3).

Financial intermediaries provide services in imperfects markets. This markets are characterized by costs of transaction and asymmetries of information. It is possible to summarize functions of traditional intermediaries to lot size, risk and information transformation (Haas, Blohm & Leimeister, 2014).

Lot Size Transformation: Financial intermediaries are able to provide systems of payment for the exchange of goods as well as mechanisms for unification of funds in order to transfer economic resources through time, geographies and industries. So, financial intermediaries can be also presented as a consumption smoothers and liquidity providers (Haas, Blohm & Leimeister, 2014).

Risk Transformation: Risks and uncertainties can be managed and traded by financial intermediaries, which are able to minimize the costs related with monitoring due to diversification and activities. So, it makes possibilities to reduce the risk which is associated with financial transactions (Haas, Blohm & Leimeister, 2014).

Crowdfunding can be presented as a two-sided market, linking capital-seeking and capital-giving agents via a crowdfunding intermediary, which applies a certain strategy regarding the funding mechanism and specialization of intermediary. Two-sided markets are able to decrease costs of transaction and information asymmetries by applying similar transformation functions, which is similar to traditional financial intermediaries. Capital-intermediation process can be described as the exchange of finding-capital for a certain return. By embedding crowdfunding in the theory of two-sided markets and financial intermediation theory, a digitally transformed model of classic financial intermediation has the structure represented in Figure 9.

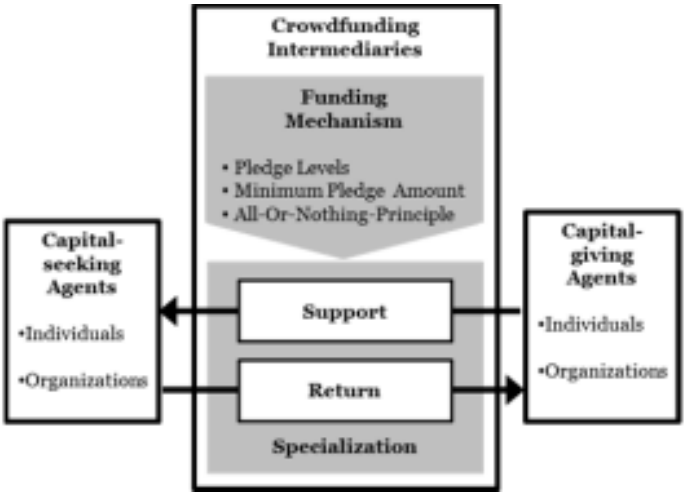

Figure 9. Crowdfunding Intermediation Model.

Source: Haas, Blohm and Leimeister (2014, p.6).

Capital-seeking and capital-giving agents: Crowdfunding intermediaries as a market maker can be a bridge for capital-seeking, which are both private persons and organizations, and capital-giving agents, which are private person.

Funding mechanisms: For realizing of transformation functions, crowdfunding intermediaries provide particular funding mechanisms. This is like pledge levels, minimum amounts of pledge and principle of all-or-nothing.

Return Types: Usually, during the traditional financial intermediation capital-giving agents receive financial compensation as return for their investments.

Specializations: Crowdfunding shows a very high level of specialization for serving heterogeneous needs. Crowdfunding intermediary's specialization may very between creative projects and products. (Haas, Blohm & Leimeister, 2014).

1.5. Determinants of success

This section presents the determination of successful entrepreneurship. By promoting entrepreneurship, the actual purpose is specially to stimulate the entrepreneurs who will be successful after starting up their businesses. For determining duration and profit it uses general results that are the amount of human capital. For retrieving relevant information, it uses social capital and strategies that are equally important for all measures of success. There are five specific determinants of success:

1. **Human capital.** Generally, that are in higher age want to make less profit and to create less employment. Younger entrepreneurs usually want to make more profits and create more employment.
2. **Financial capital.** Profitability receives negative influence from the amount of income which is not generated from the founded firm. This process makes employment. Generally, firms that are financed with own capital have less employment. When a business partner made some financial investment, employment achievements are higher.
3. **Social capital.** The influence of other entrepreneurs and profit making are negatively related. When there is a contact with other entrepreneurs it can make positive influence on the employment.
4. **Strategies for keeping up with business.** Entrepreneurs focus on commercial relations in finding relevant information which helps to save business. It shows success for all three measures. When focus is for branch, it is only associated with duration. The focus on direct business relations, which includes customers and supplier, is linked to profitability. Informal contact with fellow-entrepreneurs has a slight influence on generated employment.
5. **Control variables.** Often, when survival of the firm is addressed male entrepreneur performs better than female entrepreneur. There is no any significant effect for gender related with profitability and employment. The entrepreneurs, who are active in the services sector of business and consider the (expected) higher income as an important motivation to start the business, do not have more success than his partners (Bosma, Praag & Wit, 2000).

Based on the literature review, the next “Research Methodology’’ chapter will present specific objectives and research hypotheses of study. Also it will present data collection, description of data analysis and the sample size.

2. Research Methodology

2.1. Objective of study and research hypothesis

The main objective of this study is to identify the overall profile differences between major crowdfunding platforms (Kickstarter and Indiegogo). The main emphasis will be placed on a few key points about Kickstarter and Indiegogo, such as advantages and disadvantages, popularity, user-friendly tools and some criteria satisfaction of this crowdfunding platforms, on the perspectives of their users.

Based on current research and to answer the main objective of the study, the following specifics objectives (SO) were established:

- **SO_1:** Kickstarter is more popular than Indiegogo;
- **SO_2:** The average cost of projects is more on the Kickstarter than on the Indiegogo;
- **SO_3:** The most popular area on the Kickstarter and Indiegogo is technology;
- **SO_4:** Kickstarter is more popular in the USA than in Europe;
- **SO_5:** Kickstarter has more future opportunities than Indiegogo;
- **SO_6:** Profile of the users on the platforms Kickstarter and Indiegogo;
- **SO_7:** Identify the profile of users of the Kickstarter and Indiegogo platforms.

To complement the analysis and for responding to the objectives previously outlined the following research hypotheses (H) have been established:

- **H_1:** There are differences between users of Kickstarter and Indiegogo platform regards satisfaction;
- **H_2:** There are differences among users of Kickstarter and Indiegogo platforms concerning user-friendly;
- **H_3:** There are differences between users of Kickstarter and Indiegogo platform looks the time period to collecting money for the projects;

H_4: There are differences among users of Kickstarter and Indiegogo platform related to the money needed for the projects;

H_5: There are differences among users of Kickstarter and Indiegogo platform related to the money collected from the investors for the projects;

H_6: There is a direct and positive relationship between the money needed for the projects and the money collected from the investors for the projects, per platform.

2.2. Data collection

As it was already presented, the crowdfunding platforms have two main participants:

1. **Entrepreneurs**, who have a project and need certain amount of money for it;
2. **Investors**, who have certain amount of money and want to find interesting projects for doing most efficient investments.

So, one of the most important steps of crowdfunding platforms is to satisfy the needs of entrepreneurs (project owners) and investors (funders). Otherwise, the dissatisfaction of entrepreneurs and investors will decrease the number of users, which will lead to destruction of the crowdfunding platforms.

The main goal of the work described in this thesis, as referred above, is to find out the satisfaction of crowdfunding platforms for two big crowdfunding websites: Kickstarter[5] and Indiegogo[6], to provide general and useful information about these major crowdfunding platforms and also to find out profile differences between them. For this it will use a few type of collecting data:

1. Satisfaction survey about crowdfunding platforms;
2. The highest investments on the crowdfunding platforms;
3. The number of projects on the crowdfunding platforms;
4. The Success Rate of projects.

The satisfaction survey was answered by entrepreneurs and project owners, who are using or have used Kickstarter and Indiegogo crowdfunding platforms. The main part of questionnaire includes 7 questions about platforms. The following table presents questions that entrepreneurs will answer and type of scale.

[5] See at https://www.kickstarter.com/
[6] See at https://www.indiegogo.com/#/picks_for_you#

Table 2. Survey Questions and Type of Scale.

Questions/Variables	Type of Scale
1. Why did you choose Kickstarter as a crowdfunding platform?	Nominal
2. What was the area of your project?	Nominal
3. Please select time period(days), that was enough for collecting all necessary money for your project.	Ordinal
4. How much money ($) did you need for your project?	Ordinal
5. How much money ($) did you get from investors of your project?	Ordinal
6. Does the tools of Kickstarter provide all necessary conditions for crowdfunding of entrepreneurs?	Nominal
7. If you have a new project, will you choose again Kickstarter?	Nominal

To find out another specific information it will collect data about the highest investments on the crowdfunding platforms. For this type of data, information will gather mostly from crowdfunding platforms, yearly reports and scientific researches about the funds turnover and investments of crowdfunding platforms. It will also study the activities of Kickstarter and Indiegogo crowdfunding platforms. During this processes it tries to find out data about the number of projects on the crowdfunding platforms, which will help us to understand how much are crowdfunding platforms popular and user-friendly.

2.3. Data analysis description

In order to answer the main objective of study, the research will conduct a quantitative analysis on the features of online crowdfunding platforms - Kickstarter and Indiegogo. Some descriptive statistics will be used to describe the basic features of the data under study for each platform. A univariate analysis will be used to allow horizontal examination of cases one variable at a time, calculating frequency tables with absolute and relative frequencies.

Some inferential statistics will also be used, with associated hypothesis tests, to help in the deductions to be made from the data collected. Since the intention of this work is to compare the average performance between two independent groups - Kickstarter and Indiegogo - the Student’s t-test will be used to assess differences between groups. For application of this test there is a need of each independent sample size to be greater or equal than 30 elements or to verify that it follows the normal distribution, resorting to the Kolmogorov-Smirnov test, and confirm that the variances are homogeneous for each independent sample using the Levene test. In order to provide a measure of how closely two variables are it will be used, for ordinal variables, the Spearman’s correlation coefficient (Spearman's rho), the nonparametric correlations.

To identify the profile of users of the Kickstarter and of the Indiegogo platforms, a multivariate analysis will be performed, namely using the Hierarchical Clusters Analysis for each user platform under study. A cluster analysis is a useful method to develop empirical classifications describing generic archetypes of a phenomenon (Kaufman & Rousseeuw, 2005). A cluster analysis follows three basic steps (Kaufman & Rousseeuw, 2005):

- First, proximities or distances between the users have to be determined;
- Second, users are grouped according to these measures using a grouping algorithm;
- Third, the optimal number of clusters has to be determined.

The first step is to find the optimum number of clusters, given that initially this is unknown. A hierarchical cluster analysis using the method proposed by Ward (1963). In this methodology, an objective function, defined as the sum of squares of deviations of the individual observations compared with the average of the group, is minimized, aiming at creating groups which have maximum internal cohesion and maximum separate external distance (Greene, 2011). This method uses the variance to evaluate distances between clusters, which results in an efficient approach when compared with other hierarchical methods (for instance, nearest neighbour, furthest neighbour and median clustering). The Ward's distance, D_w, between clusters C_i and C_j is the difference between the total within cluster sum of squares for the two clusters separately, and within cluster sum of squares, which results from merging the two clusters in cluster C_{ij} (Greene, 2011):

$$D_w\left(C_i, C_j\right) = \sum_{x \in C_i}\left(x - r_i\right)^2 + \sum_{x \in C_j}\left(x - r_j\right)^2 - \sum_{x \in C_{ij}}\left(x - r_{ij}\right)^2 \qquad [1]$$

where r_i is the centroid of C_i, r_j is the centroid of C_j and r_{ij} is the centroid of C_{ij}.

To implement a dissimilarity measure between subjects, it is selected the Euclidean Distance Squared. The distance is defined as the square root of the sum of the squared differences between the values of *i* and *j* for all the selected variables ($k = 1, 2, ..., p$), (Johnson, & Wichern 2007):

$$D_{ij} = \sqrt{\sum_{k=1}^{p}\left|x_{ik} - x_{jk}\right|^2} \qquad [2]$$

where x_{ik} is the value of the variable k for cases i and x_{jk} is the value of the variable k for cases j.

In case of the existence of outliers, they must be removed from the analysis.

A common way to visualize the cluster analysis progress is through the draw of a Dendrogram, displaying the distance level at which there is a combination user of the Kickstarter and Indiegogo platforms and

clusters. Nevertheless, in order to identify the optimal number of clusters, it will be used the coefficient of determination (R-Sq.) and the relativized distance between clusters.

Table 3 briefly presents the aims, the research hypothesis and the respective statistical techniques analysis considered.

Table 3. Data Analysis Techniques.

Label	Specific Objectives (SO) or Research Hypothesis (H)	Data Analysis Techniques
SO_1:	Kickstarter is more popular than Indiegogo	Frequency tables
SO_2:	The average cost of projects is more on the Kickstarter than on the Indiegogo	Frequency tables
SO_3:	The most popular area on the Kickstarter and Indiegogo is technology	Frequency tables
SO_4:	Kickstarter is more popular in the USA than in Europe	Frequency tables
SO_5:	Kickstarter has more future opportunities than Indiegogo	Frequency tables
SO_6:	Profile of the users on the platforms Kickstarter and Indiegogo	Frequency tables
SO_7:	Identify the profile of users of the Kickstarter and Indiegogo platforms	Cluster Analysis
H_1:	There are differences between users of Kickstarter and Indiegogo platform regards satisfaction	Student t-test
H_2:	There are differences among users of Kickstarter and Indiegogo platforms concerning user-friendly	Student t-test
H_3:	There are differences between users of Kickstarter and Indiegogo platform looks the time period to collecting money for the projects	Student t-test
H_4:	There are differences among users of Kickstarter and Indiegogo platform related to the money needed for the projects	Student t-test
H_5:	There are differences among users of Kickstarter and Indiegogo platform related to the money collected from the investors for the projects	Student t-test
H_6:	There is a direct and positive relationship between the money needed for the projects and the money collected from the investors for the projects, per platform	Spearman's correlation coefficient

In order to undertake hypothesis testing it will take in consideration a level of statistical significance of 5%. All output will be produced by using the IBM SPSS Statistics 23.

2.4. Sample size

To perform the multivariate analyses, 10 observations per question are needed. In order to not violate this assumption, 200 questionnaires were sent. Cluster analysis is a technique that requires a large sample size (at least 10 observations/participants per variable is necessary to avoid computational difficulties). The respondents answered 140 questionnaires. Therefore, the sample size consists of 140 observations (78 Kickstarter and 62 Indiegogo). So, the respondent ratio for survey about satisfaction of crowdfunding platform is 70%. Generally, the questionnaire has two parts (see in Appendix):

1. Three questions about gender, age and the type of crowdfunding platform used;
2. Seven questions, which are made especially for finding out satisfaction of entrepreneurs. This is the main part of questionnaire.

The questionnaire has also specific questions for each crowdfunding platform. If the third answer on the first part is Kickstarter, the second part of questionnaire will include questions about Kickstarter and the same for Indiegogo. Questionnaires were sent to entrepreneurs, to assess their opinions about their crowdfunding projects. It is also possible to find, on the crowdfunding platforms, some projects with specific information about their creators, which made it possible to send questionnaires to them. All answers were collected by using these methods.

The assessment of the success rate of crowdfunding platforms requires data about the number of projects that were successfully funded and the number of projects that did not made this goal. Generally, this information is not available and there were some difficulties during the research process, especially for the Indiegogo crowdfunding platform. It was only possible to get information from the Kickstarter, which they update daily.

On the bases of research methodology, the next chapter will present and analyse the results. It will include descriptive analysis, validation of research hypothesis, cluster analysis and the success rate calculated for Kickstarter.

3. Presentation and Analysis of Results

3.1. Descriptive analysis

From a total of 200 questionnaires that were sent, it was possible to get 140 answers from entrepreneurs regarding their satisfaction with crowdfunding platforms. 56% (corresponding to a total of 78 respondent) of the questionnaires are relative to the Indiegogo crowdfunding and 44% (correspond a total of 62 respondent) were from Kickstarter crowdfunding platform. The characterization of the respondents can be seen in Table 4 and Table 5.

Table 4. The results about gender and age of entrepreneurs on the Indiegogo.

Age	Gender		Total	
	Female	Male	n	%
17-21	11	10	21	26.9%
22-26	11	17	28	35.9%
27-31	6	9	15	19.2%
32-36	9	0	9	11.5%
37-41	1	2	3	3.8%
42-45	-	2	2	2.6%
Total	***38***	***40***	***78***	***100.0%***

Indiegogo has 49% (corresponding to a total of 38 respondent) female entrepreneurs and 51% (correspond a total of 40 respondent) male entrepreneurs. This results help to answer to *''SO$_6$: Profile of the users on the platforms Kickstarter and Indiegogo''.* It has more young users: 63% (correspond a total of 49 respondent) entrepreneurs are less than 27 years old. This situation is gender independent.

Kickstarter has 45% (correspond a total of 28 respondent) female entrepreneurs and 55% (correspond a total of 34 respondent) male entrepreneurs. Like in Indiegogo, it also has more young users: 64%

(correspond a total of 40 respondent) entrepreneurs from 62 are less than 27 years old. This situation is gender independent.

Table 5. The results about gender and age of entrepreneurs on the Kickstarter.

Age	Gender		Total	
	Female	Male	n	%
17-21	9	10	19	30.6%
22-26	8	13	21	33.9%
27-31	4	7	11	17.7%
32-36	3	4	7	11.3%
37-41	4	-	4	6.5%
42-45	-	-	-	-
Total	***28***	***34***	***62***	***100.0%***

By using descriptive analysis, the following tables present final results of survey about entrepreneurs' satisfaction of two huge crowdfunding platforms: Kickstarter and Indiegogo. The results of following tables help to answer the questions related with hypothesis and specific objectives.

To answer to the 1st specific objective ''SO_1: *Kickstarter is more popular than Indiegogo*'', the respondents answered to the question ''*Why did you choose Kickstarter/Indiegogo as a crowdfunding platform?*''. Table 6 presents the results for each platform and per alternatives of answers.

Table 6. Factors of choosing Kickstarter/Indiegogo.

Alternatives of Answers	Kickstarter		Indiegogo	
	n	%	n	%
A. It is more popular than Indiegogo/Kickstarter.	23	37.1	8	10.3
B. Information about Kickstarter/Indiegogo is more open and it is possible find out all opportunities.	16	25.8	13	16.7
C. I was looking about good experiences for crowdfunding platforms, and I found luckier entrepreneurs in Kickstarter/Indiegogo than in Indiegogo/Kickstarter.	9	14.5	16	20.5
D. It was easier to use Kickstarter/Indiegogo platform than Indiegogo/Kickstarter. I found more videos and guidelines about how to work in Kickstarter/Indiegogo platform.	8	12.9	13	16.7
E. It was/was not working with "all-or nothing" model, and it was more efficient for me, because it was a guarantee that I will finish my project from the beginning to end.	6	9.7	28	35.9
Total	***62***	***100.0***	***78***	***100.0***

Table 6 shows that 37.1% (correspond a total of 23 respondent) of Kickstarter's entrepreneurs have chosen this platform because for them it is more popular than Indiegogo. Only 10.3% (correspond a total

of 8 respondent) of Indiegogo's entrepreneurs have chosen this platform because for them it is more popular than Kickstarter. All this results shows that Kickstarter is more popular than Indiegogo, which is the answer of the 1st specific objective.

To answer to 3rd specific objective ''SO_3: *The most popular area on the Kickstarter and Indiegogo is technology"*, the respondents answered to the question *"What was the area of your project?"*. The results for each platform and per alternatives of answers are presented in Table 7.

Table 7. Crowdfunding areas of Kickstarter/Indiegogo.

Alternatives of Answers	Kickstarter		Indiegogo	
	n	%	n	%
A. Technology	22	35.5	24	30.8
B. Art	11	17.7	11	14.1
C. Food	7	11.3	15	19.2
D. Small business	10	16.1	14	17.9
E. Environment	7	11.3	10	12.8
F. None of them	5	8.1	4	5.1
Total	***62***	***100.0***	***78***	***100.0***

Table 7 shows that 35.5% (correspond a total of 22 respondent) of Kickstarter's entrepreneurs and 30.8% (correspond a total of 22 respondent) have done their crowdfunding projects in the technological area. Both of them are highest result, which means that the most popular area for both platform is technology, which is the answer of 3rd specific objective.

For finding out information about average time period that was necessary for money collecting process, the respondents answered to the question *"Please select time period(days), that was enough for collecting all necessary money for your project"*. The following table shows the results for each platform and per alternatives of answers.

Table 8. The implementation periods of projects for Kickstarter/Indiegogo.

Alternatives of Answers	Kickstarter		Indiegogo	
	n	%	n	%
A. 1-10 days	7	11.3	14	17.9
B. 11-20 days	16	25.8	31	39.7
C. 21-30 days	21	33.9	19	24.4
D. 31-40 days	13	21.0	11	14.1
E. More than 40 days	5	8.1	3	3.8
Total	***62***	***100.0***	***78***	***100.0***

Table 8 shows that on Kickstarter 37.1% (correspond a total of 23 respondent) of projects were done in 1-20 days, and for the same period Indiegogo has 57.6% (correspond a total of 45 respondent) of projects, which means that usually Indiegogo has less time period for finishing projects than Kickstarter.

For finding out information about average amount of money, that was necessary to satisfy needs of crowdfunders, the respondents answered to the question *"How much money ($) did you need for your project?".* Table 9 presents the results for each platform and per alternatives of answers.

Table 9. Necessary money for finishing projects.

Alternatives of Answers	Kickstarter		Indiegogo	
	n	%	n	%
A. $0-$100,000	8	12.9	22	28.2
B. $100,001-$250,000	13	21.0	20	25.6
C. $250,001-$400,000	24	38.7	16	20.5
D. $400,001-$550,000	10	16.1	14	17.9
E. More than $550,000	7	11.3	6	7.7
Total	***62***	***100.0***	***78***	***100.0***

Table 9 shows, that usually entrepreneurs of Kickstarter need more investments for their projects than entrepreneurs of Indiegogo. 66.1% (correspond a total of 41 respondent) of Kickstarter's entrepreneurs need more than $250,001 money, while only 46.1% (correspond a total of 36 respondent) of Indiegogo's entrepreneurs need the same amount of money. Also, only 33.9% (correspond a total of 21 respondent) of Kickstarter's entrepreneurs need less than $250,000, while for 53.8% (correspond a total of 42 respondent) of Indiegogo's entrepreneurs this amount of money is enough for finishing their crowdfunding projects.

To complete data of previous table and to answer to 2nd specific objective ''SO_2: *The average cost of projects is more on the Kickstarter than on the Indiegogo"* the respondents answered to the question *"How much money ($) did you get from investors of your project?"*. The results for each platform and per alternatives of answers are presented in Table 10.

Table 10. The size of investments for projects.

Alternatives of Answers	Kickstarter		Indiegogo	
	n	%	n	%
A. $0-$100,000	6	9.7	17	21.8
B. $100,001-$250,000	12	19.4	20	25.6
C. $250,001-$400,000	13	21.0	18	23.1
D. $400,001-$550,000	17	27.4	17	21.8
E. More than $550,000	14	22.6	6	7.7
Total	***62***	***100.0***	***78***	***100.0***

Table 10 shows that 71% (correspond a total of 44 respondent) of Kickstarter's entrepreneurs have gotten more than $250,001 investments, while only 52.6% (correspond a total of 41 respondent) of Indiegogo's entrepreneurs have gotten the same amount of investments. Also, only 29.1% (correspond

a total of 18 respondent) of Kickstarter's entrepreneurs have gotten less than $250,000 investments, while 47.4% (correspond a total of 37 respondent) of Indiegogo's entrepreneurs have gotten the same amount of investments. All these results mean that the average cost of Kickstarter's projects is more than for Indiegogo. It helps to answer to 2nd specific objective.

For finding out the service quality of Kickstarter and Indiegogo, the respondents answered to the question *"Do the tools of Kickstarter/Indiegogo provide all necessary conditions for crowdfunding of entrepreneurs?".* Table 11 presents the results for each platform and per alternatives of answers.

Table 11. Efficient of crowdfunding conditions.

Alternatives of Answers	Kickstarter		Indiegogo	
	n	%	n	%
A. Yes, it is completely enough	33	53.2	30	38.5
B. Yes, but it needs to be improved.	17	27.4	26	33.3
C. No, it has a few gaps.	6	9.7	15	19.2
D. No, it needs to be fully changed	6	9.7	7	9.0
Total	***62***	***100.0***	***78***	***100.0***

Table 11 shows that 80.6% (correspond a total of 50 respondent) of Kickstarter's users are satisfied and for Indiegogo it is 71.8% (correspond a total of 56 respondent). Both of them have high level of satisfaction, which means that usually all necessary conditions provided by these platforms are enough and useful for entrepreneurs.

To answer to 4th specific objective *"SO_4: Kickstarter is more popular in the USA than in Europe",* by using information of Figure 7 the following table presents countries that have the highest number of projects on the Kickstarter crowdfunding platform.

Table 12. Number of projects on the Kickstarter crowdfunding platform.

Country	Number of crowdfunding projects	%
USA	229 487	84.57%
UK	23 520	8.67%
Canada	10 522	3.88%
Germany	2 187	0.81%
The Netherlands	1 856	0.68%
France	1 633	0.60%
Spain	1 155	0.43%
Sweden	1 007	0.37%
Total	***271 367***	***100.0***

Table 12 shows that 84.57% of Kickstarter's projects are in the USA, which is the highest number in the world. Also, USA has more projects than all European countries that have highest number of projects in Europe. This results help to answer to 4th specific objective.

To complete data of previous table and to answer to 5th specific objective *"$SO_{5:}$ Kickstarter has more future opportunities than Indiegogo"* the respondents answered to the question *"If you have a new project, will you choose again Kickstarter/Indiegogo?"*. The results for each platform and per alternatives of answers are presented in the following table.

Table 13. Future opportunities for Kickstarter/Indiegogo.

Alternatives of Answers	Kickstarter		Indiegogo	
	n	%	n	%
A. Yes, because I am fully satisfied.	11	17.7	18	23.1
B. Yes, because despite difficulties I have a long experience here and I will be sure for my all steps.	20	32.3	25	32.1
C. No, because I am fully unsatisfied	8	12.9	9	11.5
D. No, because I want to try new platforms for my other projects, which will open more opportunities for me.	16	25.8	15	19.2
E. It depends what kind of project I will want to do.	7	11.3	11	14.1
Total	***62***	***100.0***	***78***	***100.0***

Table 13 shows that 50% (corresponding to a total of 31 respondent) of Kickstarter's users are ready to choose again Kickstarter for their future projects and 55.2% (correspond a total of 43 respondent) of Indiegogo's users are ready to choose again Indiegogo. So, despite lower level of satisfaction, Indiegogo has more users that are ready to continue working with this crowdfunding platform. This results with the results of Table 11 help to answer 5th specific objective.

The following table shows the summary of the main results.

Table 14. Summary of the Main Results.

Label	Specific Objectives (SO)	Main Results
SO_1:	Kickstarter is more popular than Indiegogo	37.1% of users said that Kickstarter is more popular.
SO_2:	The average cost of projects is more on the Kickstarter than on the Indiegogo	66.1% projects of Kickstarter need more than $250,001 and 53.8% projects of Indiegogo need less than $250,000.
SO_3:	The most popular area on the Kickstarter and Indiegogo is technology	35.5% projects of Kickstarter and 30.8% projects of Indiegogo are in the technological area.
SO_4:	Kickstarter is more popular in the USA than in Europe	Geographical figure and statistics show that USA has the highest number of crowdfunding project for both platforms.
SO_5:	Kickstarter has more future opportunities than Indiegogo	The percentage of satisfied users on Indiegogo platforms is 5.2% more than on Kickstarter Platform.
SO_6:	Profile of the users on the platforms Kickstarter and Indiegogo	55% of Kickstarter's user are male and 45% are female. 51% of Indiegogo's users are male and 49% are female.

3.2. Research hypothesis validation

In order to answer the main objective of this current research it will be carried out the results for each research hypothesis, in accordance with the explanation presented in section 2.3.

Based on the information presented in Table 15, and assuming a significance level of 5%, it can be concluded, with sufficient and significant statistical evidence, that:

- There are no differences between users of Kickstarter and Indiegogo platform regards satisfaction;
- There are no differences among users of Kickstarter and Indiegogo platforms concerning user-friendliness;
- There are differences between users of Kickstarter and Indiegogo platform looks the time period to collecting money for the projects;

- There are no differences among users of Kickstarter and Indiegogo platform related to the money needed for the projects;
- There are differences among users of Kickstarter and Indiegogo platform related to the money collected from the investors for the projects;
- There is a direct and positive relationship between the money needed for the projects and the money collected from the investors for the projects, per platform. This means that when the money needed for the projects increase the money collected from the investors for the projects also increase. Although it is clear that there is a closer relationship between the money needed for the projects and the money collected from the investors for the projects in Indiegogo platform.

Satisfaction is a part of certain community with similar priorities and an observation of the realisation and success for Kickstarter and Indiegogo crowdfunding platforms. Both of them have user-friendly conditions, which is one of the most important part for crowdfunding platforms, because it has direct relation with satisfaction of Kickstarter and Indiegogo (Hemer, 2011).

For increasing the level of success project producers use crowdfunding as a tool to help their projects to get early phase funding by small investment from the crowds. Generally, for Kickstarter and Indiegogo time period of collecting necessary funds is really short for successful and efficient crowdfunding projects. During the projects that have some gups the period can be long and it has different behaviour for different crowdfunding platforms (Guo, 2011).

The following table shows final result of research hypothesis.

Table 15. Final result for the research hypotheses.

Label	Research Hypothesis (H)	Applied Test	Test value	p-value	Final Result
H_1:	There are differences between users of Kickstarter and Indiegogo platform regards satisfaction	Student t-test	0.596	0.554	Not Corroborated
		Levene's Test for Equality of Variances	1.165	0.286	
H_2:	There are differences among users of Kickstarter and Indiegogo platforms concerning user-friendly	Student t-test	-1.950	0.055*	Not Corroborated
		Levene's Test for Equality of Variances	16.380	< 0.001	
H_3:	There are differences between users of Kickstarter and Indiegogo platform looks the time period to collecting money for the projects	Student t-test	2.297	0.023	Corroborated
		Levene's Test for Equality of Variances	0.005	0.943	
H_4:	There are differences among users of Kickstarter and Indiegogo platform related to the money needed for the projects	Student t-test	1.959	0.052*	Not Corroborated
		Levene's Test for Equality of Variances	4.082	0.045	
H_5:	There are differences among users of Kickstarter and Indiegogo platform related to the money collected from the investors for the projects	Student t-test	3.049	0.003	Corroborated
		Levene's Test for Equality of Variances	0.091	0.764	
$H_{6.1}$:	There is a direct and positive relationship between the money needed for the projects and the money collected from the investors for the projects, for Kickstarter	Spearman's rho	0.624	< 0.001	Corroborated
$H_{6.2}$:	There is a direct and positive relationship between the money needed for the projects and the money collected from the investors for the projects, for Indiegogo	Spearman's rho	0.710	< 0.001	Corroborated

Note: *, it was used the information for Equal variances not assumed.

3.3. Cluster analysis

In this section it will be present the results of cluster analysis for each platform, in order to identify the profile of users of the Kickstarter and Indiegogo platforms (SO_7).

The situations of existence of outliers were analysed. For this it was produced the Box-Plot graph (Figure 10 and Figure 11).

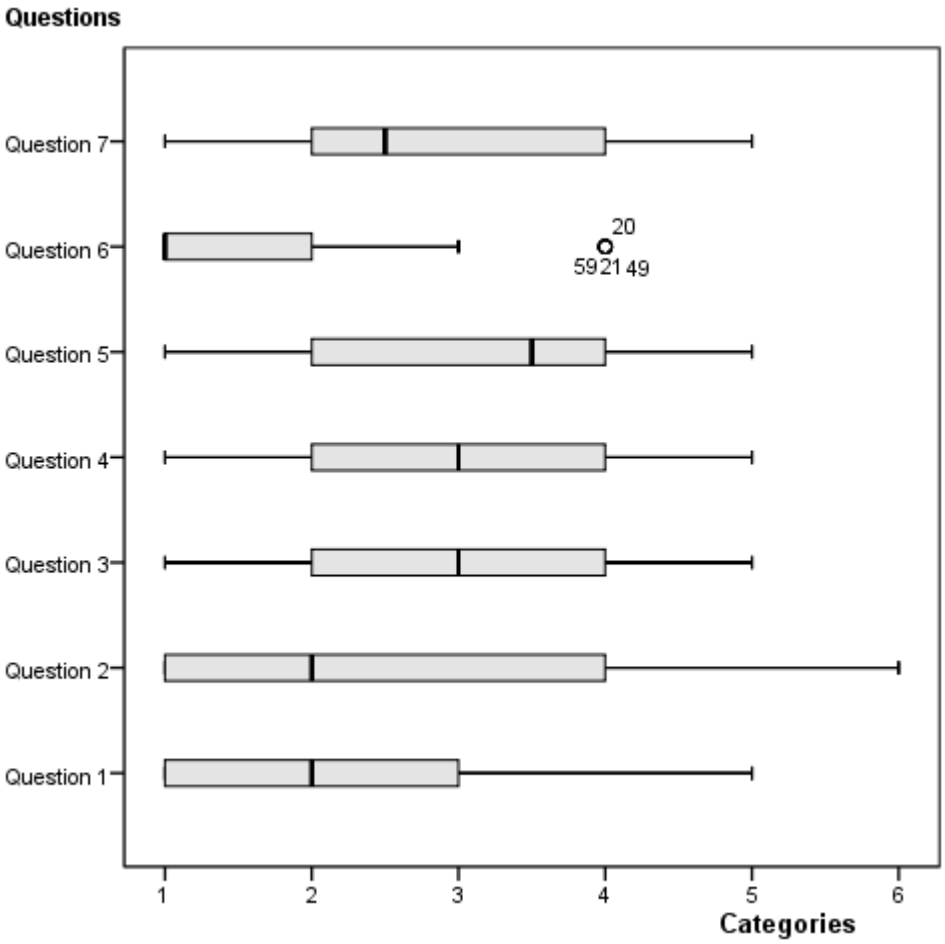

Figure 10. Box-Plot for Kickstarter platform.

In accordance with the results presented in Figure 10 it was possible to observe that 4 outliers exist, namely for Question 6. And for Indiegogo platform 3 outliers were found. In this sense for each analysis these outliers were exclude of the analysis.

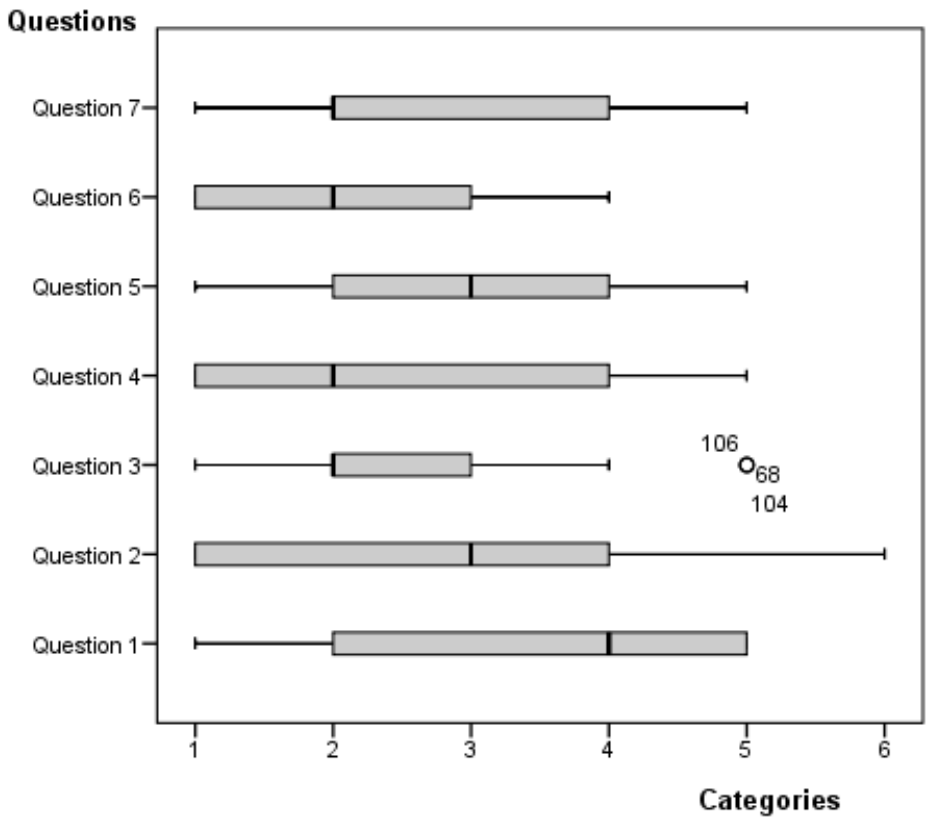

Figure 11. Box-Plot for Indiegogo platform.

The Kickstarter platform indicate a four cluster solution that can be clearly interpreted after inspecting the Dendrogram (Figure 12). To validate the optimal number of clusters, the coefficient of determination (R-Sq.) was used and the relativized distance between clusters. Figure 13 clearly suggests the existence of four distinct clusters. A solution of four clusters was chosen, explaining 40% of the total variance.

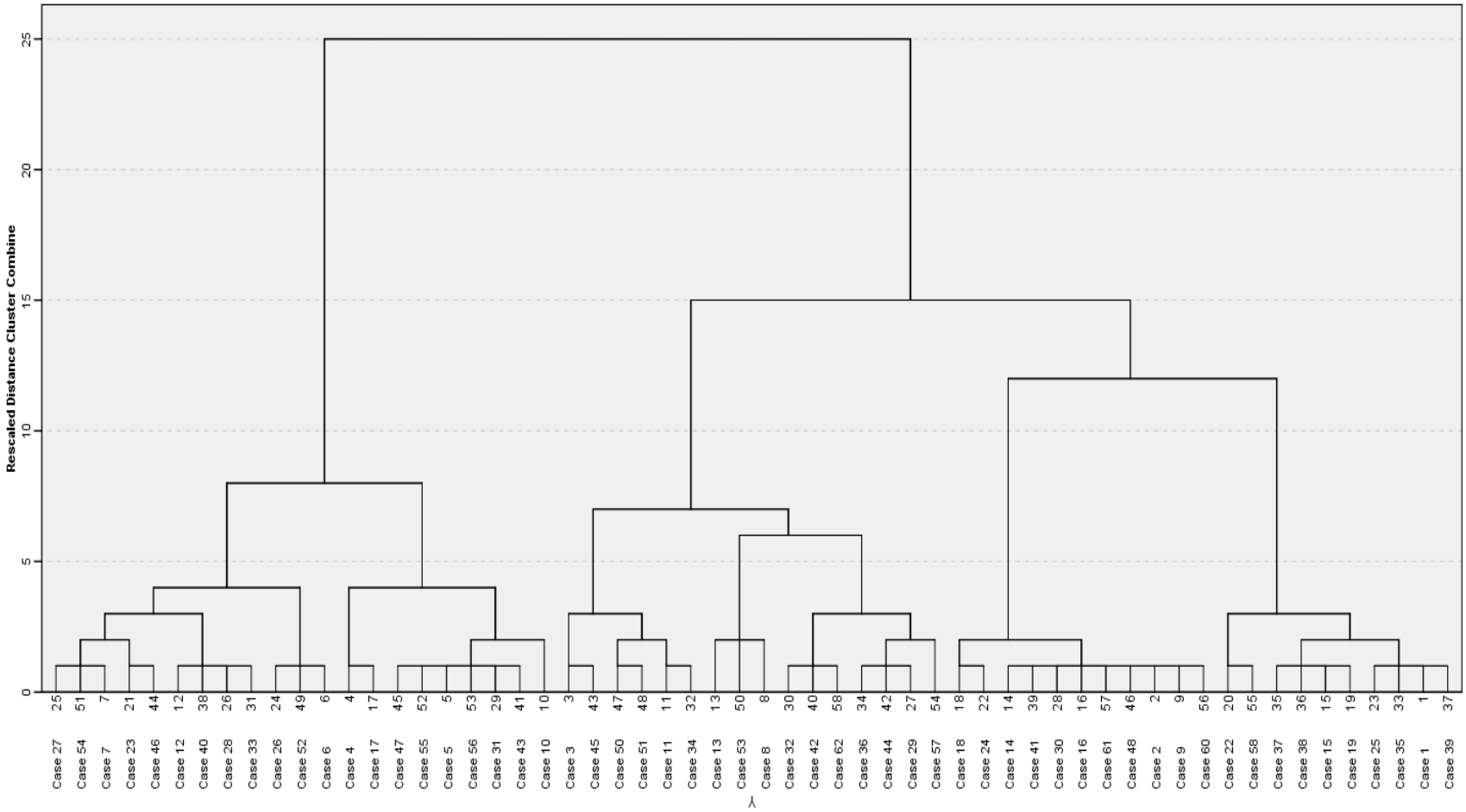

Figure 12. Dendrogram using Ward Linkage, for users of Kickstarter platform.

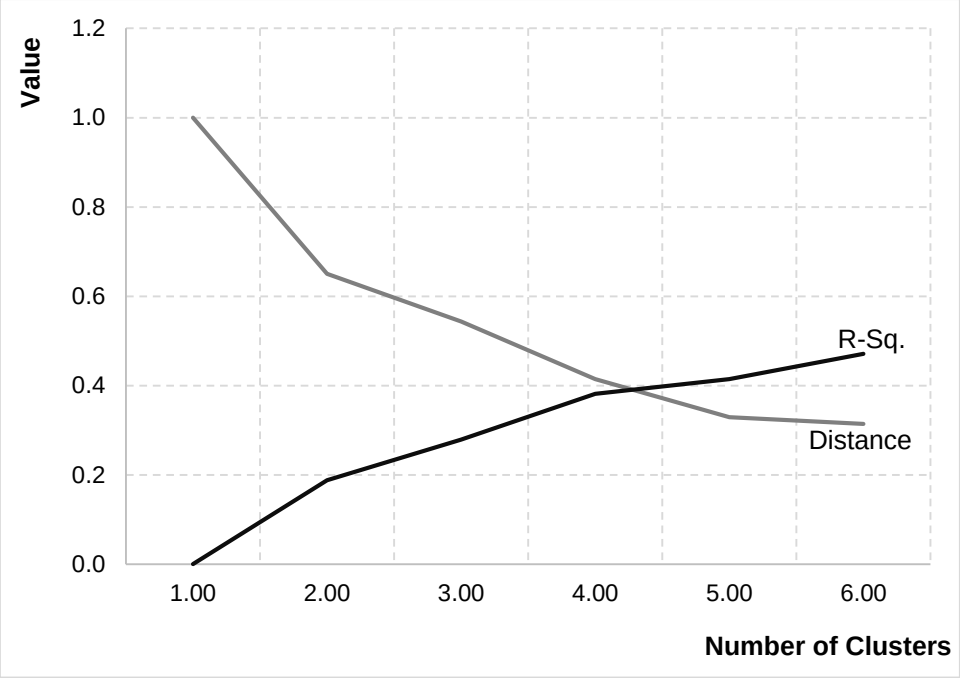

Figure 13. Optimal number of clusters for Kickstarter platform.

As shown in the previous figure, there are four clusters for Kickstarter crowdfunding platform. By using results of cluster analysis it is possible to decide the names for each cluster. All clusters have their own features, which can be essential bases for naming the clusters.

From Table 16 it is possible to find all information about clusters related with questions and answers. It shows percentage of all answers for each question and cluster. The highest level of these percentages shows the most typical characteristics for each cluster. All these effects help to decide the names of clusters. Below are presented all clusters with their names and main characteristics.

Cluster 1 - Lucky Entrepreneurs

The cluster Lucky Entrepreneurs describes efficient opportunities for entrepreneurship. Table 16 shows that there are 50 percent entrepreneurs who have received more than $550,000 and generally (50%) entrepreneurs are satisfied with services of Kickstarter and 70 percent of entrepreneurs are ready to choose again this crowd funding platform for their future projects. Also, 50 percent of entrepreneurs have done their projects within 11-20 days, which is really short and efficient time for gathering money form investors.

Cluster 2 - Uncertain Entrepreneurs

Despite the fact that 90% of entrepreneurs are satisfied with the tools provided by Kickstarter, 36% of entrepreneurs do not want to choose again Kickstarter as a crowdfunding platform for their future projects, also another 36% of entrepreneurs connect their choices of crowdfunding

platforms with future projects and they pay their attention to popularity of platforms. All these facts show the uncertainty of entrepreneurs in this cluster.

Cluster 3 - Patient and Curious Entrepreneurs

The entrepreneurs of this cluster have the longest period for project implementation: 44% of entrepreneurs have finished the collecting of money within 31-40 days. Despite the fact that 69% of entrepreneurs are satisfied with provided tools by Kickstarter, 31% of entrepreneurs want to change Kickstarter just for trying new platforms. This cluster is also distinguished by the disproportionate allocation of investments: 25% of investments are less than $100,000 and 25% of investments are more than $400,001.

Cluster 4 - Original and Loyal Entrepreneurs

The entrepreneurs of the first three clusters have done their projects in the technological area. Cluster 4 is quite different: 29% of entrepreneurs have done their projects in the area of small business and another 29% have done their projects in the environmental area. Generally, the entrepreneurs of this cluster are satisfied: for 57% of them the tools of Kickstarter are completely enough and 66% of them are ready to choose again Kickstarter for their future projects.

Table 16. Results of Cluster Analysis for Kickstarter crowdfunding platform.

Questions	**Cluster 1** (n=10)	**Cluster 2** (n=11)	**Cluster 3** (n=16)	**Cluster 4** (n=21)
Q1. Why did you choose Kickstarter?	It was easier to use Kickstarter platform than Indiegogo (40%)	It is more popular than Indiegogo (55%)	Kickstarter has more open information (31%)	It is more popular than Indiegogo (48%)
Q2. What was the area of your project?	Technology (50%)	Technology (55%)	Technology (50%)	Small business (29%) Environment (29%)
Q3. Please select time period(days) of your project.	11-20 days (50%)	21-30 days (55%)	31-40 days (44%)	11-20 days (38%)
Q4. How much money ($) did you need for your project?	$100,001-$250,000 (50%)	$400,001-$550,000 (36%)	$250,001-$400,000 (38%)	$250,001-$400,000 (38%)
Q5. How much money ($) did you get from investors of your project?	More than $550,000 (50%)	$400,001-$550,000 (36%)	$0-$100,000 (25%) $400,001-$550,000 (25%)	$250,001-$400,000 (28%)
Q6. Does the tools of Kickstarter provide all necessary conditions?	Yes, it is completely enough (50%)	Yes, it is completely enough (45%) Yes, but it needs to be improved (45%)	Yes, it is completely enough (69%)	Yes, it is completely enough (57%)
Q7. Will you choose again Kickstarter?	Yes, despite difficulties (70%)	No, because I want to try new platforms (36%) It depends on the project (36%)	Yes, despite difficulties (31%) No, because I want to try new platforms (31%)	Yes, because I am fully satisfied (33%) Yes, despite difficulties (33%)

Following the same philosophy analysis for Indiegogo platform the results of the cluster analysis indicate a five cluster solution as it can inspect in the Dendrogram (Figure 14). Moreover, to validate optimal number of clusters the coefficient of determination (R-Sq.) and the relativized distance between clusters were used, and as well as the Figure 15 evidently suggested the presence of five distinct clusters. A solution of four clusters was chosen, explaining 40% of the total variance.

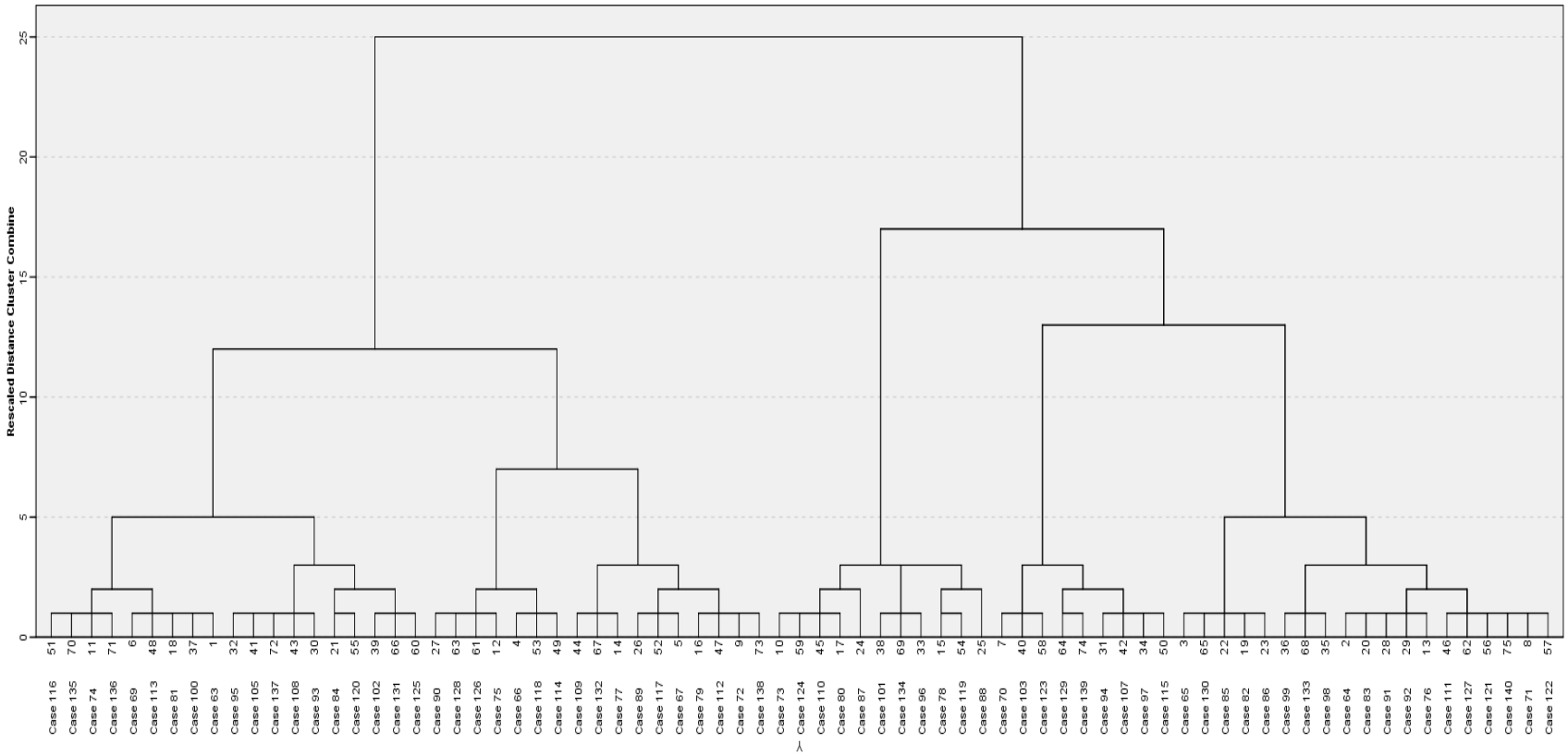

Figure 14. Dendrogram using Ward Linkage, for users of Indiegogo platform.

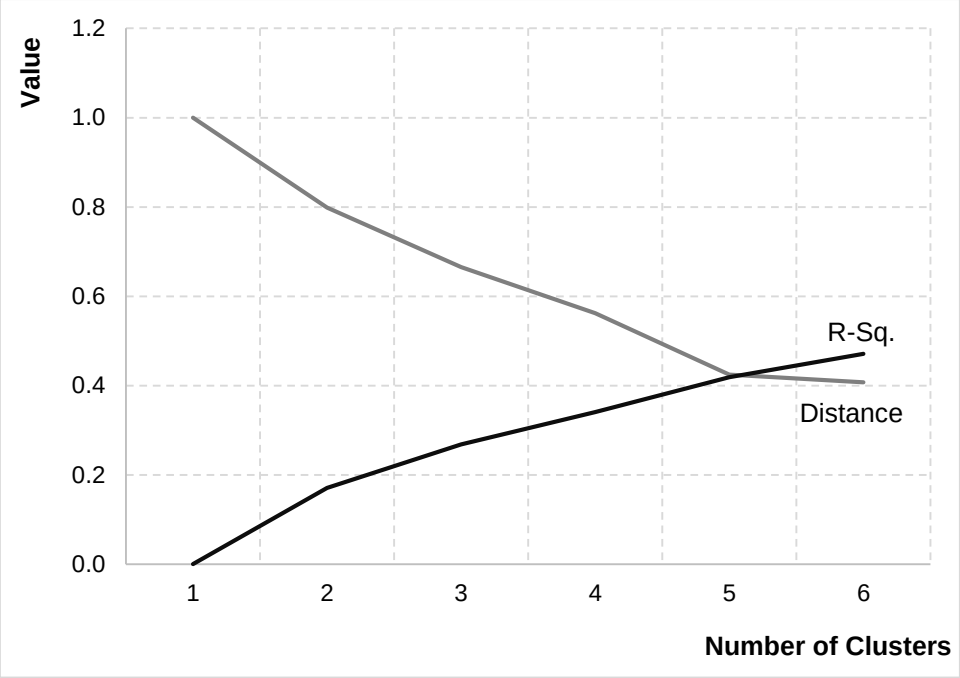

Figure 15. Optimal number of clusters for Indiegogo platform.

As shown in the previous figure, there are five clusters for Indiegogo crowdfunding platform. By using results of cluster analysis it is possible to decide the names for each cluster for this platform too.

For Indiegogo it uses the same philosophy has used for Kickstarter and in this regards it was reach the follow clusters (Table 17).

Table 17. Results of Cluster Analysis for Indiegogo crowdfunding platform.

Questions	Cluster 1 (n=19)	Cluster 2 (n=19)	Cluster 3 (n=17)	Cluster 4 (n=9)	Cluster 5 (n=11)
Q1. Why did you choose Indiegogo?	It was not working with "all-or nothing" model (68%)	It was not working with "all-or nothing" model (63%)	Information about Indiegogo is more open (47%)	Information about Indiegogo is more open (56%)	I found luckier entrepreneurs in Indiegogo (36%)
Q2. What was the area of your project?	Small business (32%)	Technology (47%)	Environment (41%)	Food (56%)	Technology (82%)
Q3. Please select time period(days) of your project.	1-10 days (37%) 11-20 days (37%)	11-20 days (42%)	21-30 days (35%)	11-20 days (44%) 21-30 days (44%)	11-20 days (64%)
Q4. How much money ($) did you need for your project?	$100,001-$250,000 (37%)	$0-$100,000 (42%)	$0-$100,000 (35%)	$250,001-$400,000 (33%)	$400,001-$550,000 (36%)
Q5. How much money ($) did you get from investors of your project?	$0-$100,000 (37%)	$0-$100,000 (32%) $250,001-$400,000 (32%)	$250,001-$400,000 (29%)	$100,001-$250,000 (44%)	$400,001-$550,000 (55%)
Q6. Does the tools of Indiegogo provide all necessary conditions?	Yes, it is completely enough (42%) Yes, but it needs to be improved (42%)	Yes, but it needs to be improved. (47%)	Yes, it is completely enough (42%)	Yes, but it needs to be improved. (78%)	No, it has a few gaps (55%)
Q7. Will you choose again Indiegogo?	Yes, despite difficulties (58%)	It depends on the project (42%)	Yes, despite difficulties (41%)	No, because I want to try new platforms (44%)	Yes, because I am fully satisfied (55%)

According the results presented in previous table for each questions it were identified and assigned the following names for each cluster.

Cluster 1 - Satisfied Businessman

This cluster has 32% entrepreneurs that want to start a small business. The entrepreneurs of this cluster have the highest level of satisfaction: 42% entrepreneurs think that the tools of Indiegogo provide all necessary conditions and for another 42% entrepreneurs it is enough, but need some improvement too. Mostly (68%) the entrepreneurs of this cluster have chosen Indiegogo, because it does not work with "all-or nothing" model.

Cluster 2 - Small Entrepreneurship

Mostly, the entrepreneurs of this cluster have small projects that need a small amount of money: 42% of them need investments between $0-100,000. But they have received all necessary investments and some of them have received more ($250,001-400,000) than was necessary. They are partly satisfied.

Cluster 3 - Environmental Activities

The entrepreneurs of this cluster have activities in the area of environment. It has 41% environmental projects and the longest time period (21-30 days) for finishing of crowdfunding projects. Mostly they are satisfied and most of them are ready to continue crowdfunding working processes with Indiegogo.

Cluster 4 - Unsatisfied Entrepreneurs

The bulk of entrepreneurs in this cluster are not ready to choose Indiegogo as a crowdfunding platform for their future projects: 44% of them want to try new platforms. Also, they have found a lot of gups: 78% of them think that the tools of Indiegogo need to be improved. Generally, the large part (56%) of entrepreneurs has crowdfunding projects in the area of food. It is important to mention that some entrepreneurs have received less money than they needed, but they have fully done their projects.

Cluster 5 - Technological Entrepreneurs

This cluster has a lot of entrepreneurs in the area of technology: 82% of entrepreneurs want to do technological crowdfunding projects. The majority (55%) of entrepreneurs in this cluster have collected money from investors from $400,001 to $500,000. Also most of them (64%) have finished their crowdfunding projects in a short period of time (11-20 days).

Next section will present success rate of Kickstarter platform. Data will be collected for one-week period from the official website of Kickstarter.

3.4. Success rate of Kickstarter crowdfunding platform

There several researches and statistical websites that have information about success rate of crowdfunding platforms. Generally, there are yearly results about success rate. For Kickstarter success rate in 2014 was 43.4% and for Indiegogo was 9.8% (Alois, 2014). For 2015 success rate of Kickstarter is 44% and for Indiegogo is 33% (Srikanth, 2015). It means that both platforms have improved their success rates, especially. Indiegogo It is interesting to find out this results for the week period. For calculating success rate of crowdfunding platform it is necessary to know the number of successful and

unsuccessful projects. It is possible to do for Kickstarter crowdfunding platform, because it has all daily information about successful and unsuccessful projects. It is not possible for Indiegogo, because all information about successful and unsuccessful projects are closed and it is not possible find daily data. For that reason, it will present success rate only for Kickstarter. The following table shows results about successful and unsuccessful projects and success rates for one week. All data is collected data from official website of Kickstarter every day.

Table 18. Success rate for Kickstarter crowdfunding platform.

Date	Number of successful projects	Number of unsuccessful projects	Total number of projects	Success rate[7]
20.04.2015	104 012	185 021	289 033	35.99%
21.04.2015	104 103	185 115	289 218	35.99%
22.04.2015	104 205	185 232	289 437	36.00%
23.04.2015	104 275	185 319	289 594	36.01%
24.04.2015	104 302	185 335	289 637	36.01%
25.04.2015	104 354	185 487	289 841	36.00%
26.04.2015	104 389	185 581	289 033	35.99%

Source: https://www.kickstarter.com/help/stats.

Table 18 shows, that in April, 2016 success rate for Kickstarter is around 36%. It means that for this period comparing with 2015-year success rate has decreased. This situation can be change related with different components.

In next chapter it will be present a general conclusion with the main findings of the current research.

[7] $Success\ Rate = \frac{Number\ of\ successful\ projects}{Total\ number\ of\ projects}$

Conclusions, Limitations and Future Research Lines

Crowdfunding is very efficient new phenomena for finding alternative finance for entrepreneurs that have projects and need investments for them. Crowdfunding has four main models: donation-based, reward-based, lending-based, and equity-based. All this models have grown during the last five years, but the highest level of growing was the lending-based crowdfunding model. All crowdfunding projects are executed on crowdfunding platforms. There are thousands of crowdfunding websites in the world, but the most popular are Kickstarter and Indiegogo. The main difference between these crowdfunding platforms is that, unlike Indiegogo, Kickstarter works with "all-or nothing" model. Both of them have a lot of users all over the world, but the highest number of users are in USA, Canada, UK and other European countries. Crowdfunding platforms does not have any restriction related with area of projects. Entrepreneurs have all possibilities to present their project in the different areas. It does not have any limitations for investors too. Everyone can invest money for all projects.

Generally, users of Kickstarter and Indiegogo crowdfunding platforms are young (less than 27 years old) entrepreneurs, but there are also some older (more than 28 years old) entrepreneurs too. There are little differences between numbers of male and female project owners. This situation is for all areas and both platforms.

For entrepreneurs, Kickstarter is more popular and sometimes it is the main reason for their choice. Also, Kickstarter has more information available, which can be a basis for new entrepreneurs during the choosing process of crowdfunding platform. It is very helpful for scientific researcher too, because it is a few times easier to find data and analyse for Kickstarter than for Indiegogo. Entrepreneurs usually prefer Indiegogo, because it does not work with "all-or nothing" model. It makes them sure that they can use their collected money even if it is less than 100%.

Most popular area of project for Kickstarter and Indiegogo is technology, which is logical because we are in the technological century. Second place for Kickstarter is the area of arts, which is in fourth place for Indiegogo. Second place for Indiegogo is the area of food, which is in fourth place for Kickstarter. This results mean that, with the exception of technological area, all other areas have different ratio for Kickstarter and Indiegogo.

Usually, most of crowdfunding projects are done between 11-30 days for both platforms. There a really less number of projects that need more than 41 days for finishing investment collecting processes. It means, that good and efficient presented projects can collect all necessary investment in the short time period. For that most important part is to create short video, which includes all details about project, such as future opportunities, costs etc.

Generally, projects on the Kickstarter platform need more investment than on the Indiegogo. Also, the amount of investments is more for Kickstarter's projects. Because in Indiegogo it is not necessary to collect 100% money, sometimes entrepreneurs do not want to wait and they are ready to do their projects with less money than they were wanted before. This means that entrepreneurs, sometimes, demand more amount of money than actually needed.

Both platforms have high level of satisfaction (80.6% for Kickstarter and 71.8% for Indiegogo), which means that usually all necessary conditions provided by Kickstarter and Indiegogo are enough and useful for entrepreneurs. Despite this high level of satisfaction, only 50% of Kickstarter's users are ready to choose again Kickstarter for their future projects and 55.2% of Indiegogo's users are ready to choose again Indiegogo for their future projects. This means that both platforms need to find gaps in their services and improve them.

As a final remark, it is necessary to mention that Kickstarter, in opposition to Indiegogo, has all the important conditions for scientific researchers. Indiegogo also could benefit from presenting more information and statistical data to help scientific researchers. It should be useful and helpful for future entrepreneurs too.

It should be noted that the main limitation of this research study has been with data collection, qualitatively and quantitatively, and in this sense the sampling procedure was limited. Also the scant information and scientific articles is reflected in a limitation, because this issue is still new and only in recent years is that it has been investigated.

In this regard, the current study may serve to contribute for the discussion of this issue. Therefore, for future research it will be interesting to analyse the implications of the crowdfunding as digitally transformed financial intermediation, working with econometric models.

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Appendix

Question were sending to entrepreneurs by the following form. It has two parts.

First part

1. What was the platform of your crowdfunding projects?[8]

    1. Kickstarter
    2. Indiegogo

2. Please write your gender and age

Gender_____

Age_____

Second part

1. Why did you choose Kickstarter as a crowdfunding platform?

    A. It is more popular than Indiegogo.
    B. Information about Kickstarter is more open and it is possible find out all opportunities.
    C. I was looking about good experiences for crowdfunding platforms, and I found luckier entrepreneurs in Kickstarter than in Indiegogo.
    D. It was easier to use Kickstarter platform than Indiegogo. I found more videos and guidelines about how to work in Kickstarter platform.
    E. It was working with "all-or nothing" model, and it was more efficient for me, because it was a guarantee that I will finish my project from the beginning to end.

2. What was the area of your project?

    A. Technology
    B. Art
    C. Food
    D. Small business
    E. Environment
    F. None of them

3. Please select time period(days), that was enough for collecting all necessary money for your project.

    A. 1-10
    B. 11-20

[8] If answer was Kickstarter, second part of questions was about Kickstarter. The same thing for Indiegogo

C. 21-30
D. 31-40
E. More than 40

4. How much money ($) did you need for your project?

A. $0-$100,000
B. $100,001-$250,000
C. $250,001-$400,000
D. $400,001-$550,000
E. More than $550,000

5. How much money ($) did you get from investors of your project?

A. $0-$100,000
B. $100,001-$250,000
C. $250,001-$400,000
D. $400,001-$550,000
E. More than $550,000

6. Does the tools of Kickstarter provide all necessary conditions for crowdfunding of entrepreneurs?

A. Yes, it is completely enough
B. Yes, but it needs to be improved.
C. No, it has a few gaps.
D. No, it needs to be fully changed

7. If you have a new project, will you choose again Kickstarter?

A. Yes, because I am fully satisfied.
B. Yes, because despite difficulties I have a long experience here and I will be sure for my all steps.
C. No, because I am fully unsatisfied
D. No, because I want to try new platforms for my other projects, which will open more opportunities for me.
E. It depends what kind of project I will want to do.