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Lappeenranta University of Technology

LUT School of Business and Management

Masters in Strategic Finance and Business Analytics

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**Driving factors behind Crowdfunding growth from both Investors and
Entrepreneurs perspective**

Focused Industry: Crowdfunding, Investment

Master's Thesis - December 2017

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Abstract

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This paper is a Master's thesis study and it aims to find the driving factors behind the participation in crowdfunding activities from both investors and entrepreneurs point of views. This research paper solely focuses on the innovative and trending way to raise investments from global audience which is publicly known as crowdfunding. The main goal of the paper is to find out the relationships of different probable factors from investor and entrepreneurs point of views which can have positive influence behind the participation in crowdfunding activities.

The background studies part of this paper has presented several relevant studies conducted about crowdfunding activities. However, based on these studies, it was quite imminent that there is a lack of researches on the motivating factors of people to participate in these activities. This is only because this sector is still a newfound one and there are a significant

amount of researches are yet to be done. From the theoretical framework, author has presented some relevant theories behind different human behavior or psychology that may have influence over their decision to participate. Moreover, the background studies also include a view on the funding market related factors that are driving people to these activities.

This research paper is an exploratory research which is conducted using deductive method. To conduct this research, a set primary data has been used to evaluate the relationship between several factor and crowdfunding activities. This set of primary data has been collected through an online survey. Based on these datasets, the potential outcome of this research will highlight the significance of relationship between several factors, both from investor and entrepreneurs point of view, and crowdfunding activities.

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Apart from family members, I would like to mention some people who have been inspiring and also, a great source of knowledge and help. First of all, my words would be insufficient to express my gratitude for my thesis supervisors Azzurra Morreale, and Professor Mikael Collan who have always been a great source of motivation, knowledge and direction towards my work. Specially, Azzurra has been directing me since the beginning of the research and because of her continuous cooperation, it was possible for me to come to a conclusion of this study.

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I am very glad to conclude this research because I wanted to contribute and explore in this new research area, and after this hard work, I can feel proud to achieve my goal. Lastly, I would love to thank my wife Nawrin Binte Nawab, for her continuous support not only during my thesis period, but also for this whole study period. She is also a Masters degree candidate here and I believe she will do excellent job in her thesis too. Thanks a lot to you, my parents and my sister for being there with me.

Faithfully,

Md Zulfiqur Islam

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1 Background

1.1 Introduction

Entrepreneurship is a key source of innovation and dynamism in the whole world (Scheder, 2014). Entrepreneurs consider the risks associated with entrepreneurship and at the same time, they are expecting the certain level of freedom in work and decision making. Major portion of these people are from young generation who are considering a world where growth and innovation are highly influenced by their optimism, energy and entrepreneurial spirit. From their initiatives, the world is experiencing new markets and solutions to global and local problems which are better than the existing one (Salkowitz, 2010). Not only prioritizing their own freedom, but also these people are significantly contributing to the innovation, productivity, economic growth and last but not the least is job creation, notably in high rate in OECD countries (OECD, 2010). With the help of technological advancement, the entrepreneurial initiatives are at peak right now and increasing day by day. From a report of Kauffman Index of Startup Activity shows that every month, 550,000 people from only United States of America launch new businesses (Kauffman, 2016). Definitely not all of those are embracing new product or services and not all of these are successful, but the number itself is indicating the rise of entrepreneurship.

One of the most important factors that influences these initiatives in financing. It can be said as an integral part of the successful transformation of an idea to a product or service. Rossi (2014) explained that the lack of capital is one of the most important obstacle in terms of growth of an idea or a company which is often not possible to fulfill by own resources. Though these group of people are attracting a great opportunity for the whole economy, it is often seen that a significant portion of these high quality ideas are dropped down because of lack of access to adequate financing for the business (Kerr and Nanda, 2009). After the financial crisis of 2008, the financing situation through banks and VCs has become much more restricted than ever. This situation is pushing entrepreneurs to opt for alternative financing like personal financing, close network financing, angel investors and crowdfunding. To understand the severity, the report of PENSICO 2015 report can be referred

according to which, 2014 has been the third consecutive year when business-to-customer (B2C) companies raised private financing worth more than USD 90 Billion only in United States of America (PENSCO, 2015). If the number can be dug down, then it can be found that only 5.6% of capital was provided by the angel investors. This is because due to considerable risks in startup initiatives, angel investors tend to invest on businesses with a proven business model. To be more specific, by 2013, the angel investment has dropped by 20% from earlier 2008 crisis period to then at 35% (Scheder, 2014). Based on the increasing financing gap and rising demand from entrepreneurial initiatives, entrepreneurs are being herder towards crowdfunding or crowdfunding now-a-days. Not surprisingly, with the touch of technology and convenient communication channels, crowdfunding has attracted a huge market in 2015 worth USD 34 Billion and expected to reach a market of USD 96 Billion by 2020 (Massolution, 2015).

Despite of this blazing demand of crowdfunding in recent time, both economic and rational factors are yet to be discussed in a broader scope by combining the view from the top to bottom. As mentioned above that due to financing gap the demand of alternative financing is increasing, but how much financing is available in the market against the startup initiatives taken in a specific market is a spot that needs to be highlighted based on the recent data. This will help to understand the demanding factor of crowdfunding. Moreover, as an individual, how a person is intrigued to participate the crowdfunding market either as an entrepreneur or as funders, is a less researched area so far due to crowdfunding being rather a new concept. This paper intends to look on the factors that are influencing the uprising of crowdfunding in a combined force. In a deeper view, this paper will discuss this phenomenon from three different point of views of financing industry, investors or funders perspective and entrepreneur's perspective.

1.2 Thesis Structure

1. Background
2. Literature Review
3. Research Problem
4. Research Methodology
5. Empirical Findings
6. Data Analysis
7. Discussion & Conclusion

This thesis paper consists of eight distinctive chapters which begins with the introduction to Crowdfunding and its growth potential in **chapter 01**. In **chapter 02**, the research problem is discussed with research questions and sub-research questions. These-sub research questions will cater to the three different point of views from which this phenomenon will be analyzed. Next, **chapter 03** presents the definitions of the research areas, literature review of previous academic research of crowdfunding and the driving factors behind it. Also, in this chapter, the driving factors will be presented from three different point of views. Along with this, this chapter also presents the research gap on which the paper is written. **Chapter 04** introduces the methodology part which describes the choices of qualitative and quantitative data. Additionally, this chapter includes the data collection process, data validity, data reliability, the analysis methods and the limitations of this research in terms of data.

Based on the data, **chapter 05** presents the analysis of the data which is retrieved from both qualitative and quantitative method. This analysis includes both statistical analysis from quantitative data and descriptive analysis from qualitative data. In the later part of the report, **chapter 06** provides a reflection of the research that can be achieved from the analysis of all sets of data. The achieved result will be compared with the goal of the paper which was described in chapter 02: Research Problem. As a quite new concept, this research area will have still much more to reveal and this recommendation will be presented in **chapter 07**. This paper will be finished off in **chapter 08** of conclusion by concluding the finding of the report in line with the problem statement.

2 Literature Review

In this chapter, the paper will introduce the concepts of crowdfunding, different types and some of the motivation factors which was researched by academics before. In this context, the motivations will be discussed in three different point of views of industry, investors or funders and entrepreneurs. It will create a framework of the concepts and literature which will help the reader to understand the necessity of a combined view of the motivation factors.

2.1 Crowdfunding

Crowdfunding is a financing or funding process where individual or group of individual raises money for a particular entrepreneurial initiative from the people from all over the world. Often there are some returns are offered to the funders or investors in exchange of their investment or financing. This definition of crowdfunding can be standardized by the definition given by Belleflamme et al. (2012) where crowdfunding is seen as “*crowdfunding describes an innovative funding model whereby individuals use the Internet – via an open call – to contribute relatively small amounts of money to support the creation of a specific product or the investment in a specific business idea either in form of donation or in exchange for some form of reward and/ or voting rights*”. This definition may seem much complex than the actual scenario of crowdfunding which is made really easy by the development of technology and greater access to communication technology availability to everyone. In the paper of Kleemann et al. (2008), it is mentioned that the web development has been a major breakthrough in the implementation of this practice.

2.1.1 Emerging of crowdfunding

For a particular business entity, there are several stages of business growth and based on those, there are several stages of financing. This can be easily understood by the flow diagram depicted by Lasrado and Lugmayr (2013).

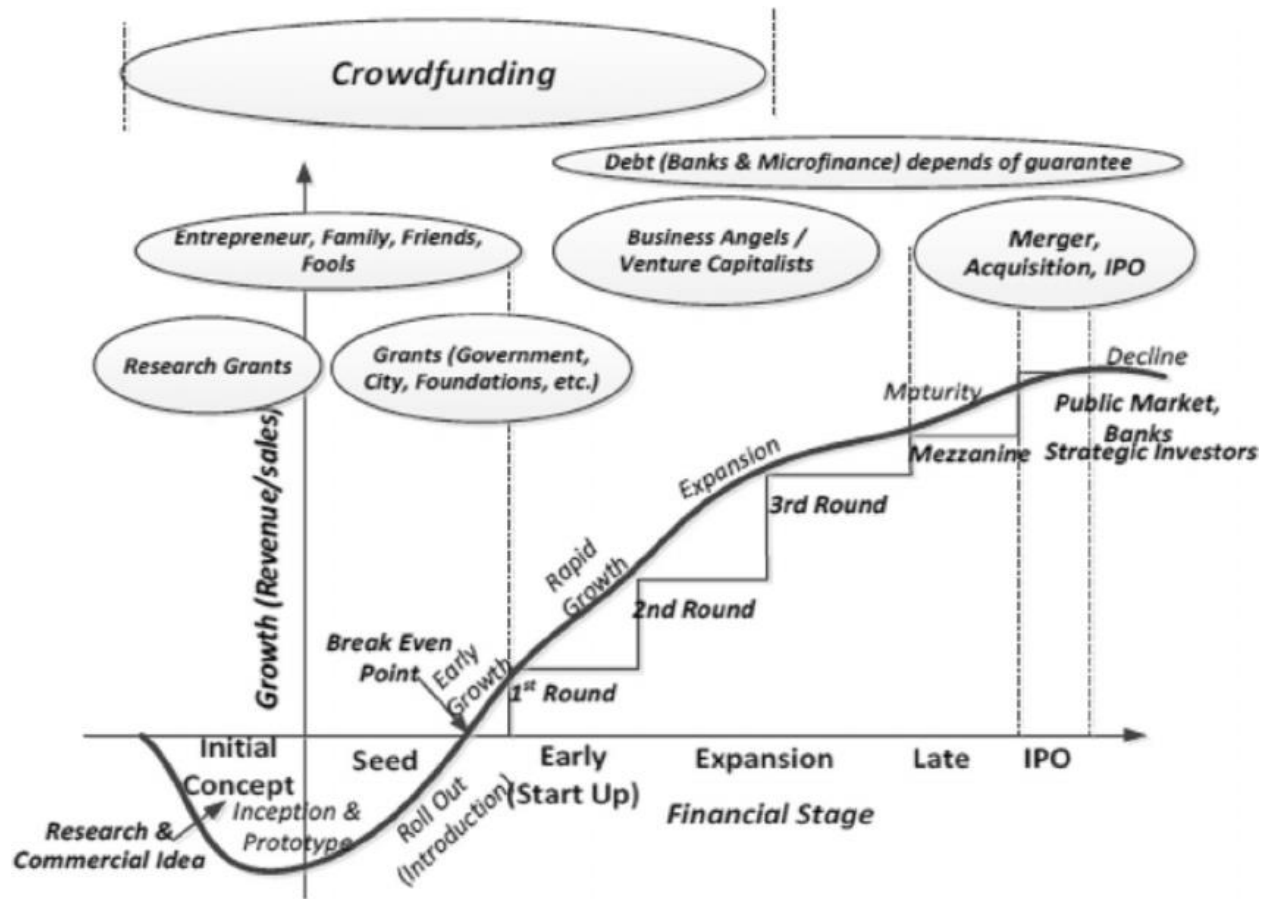


Figure 01: Financing Lifecycle (Lasrado and Lugmayr, 2013)

From the above diagram, it can be noticed that crowdfunding has significant importance in the seed stage of a business where the entity requires the funding for initial product and market development. Furthermore, it is supported by Giudici et al., (2012) that crowdfunding is often seen as a primary source of seed funding for a startup company. The same illustration below was given by Scheder (2014) based on a report of Earnest and Young.

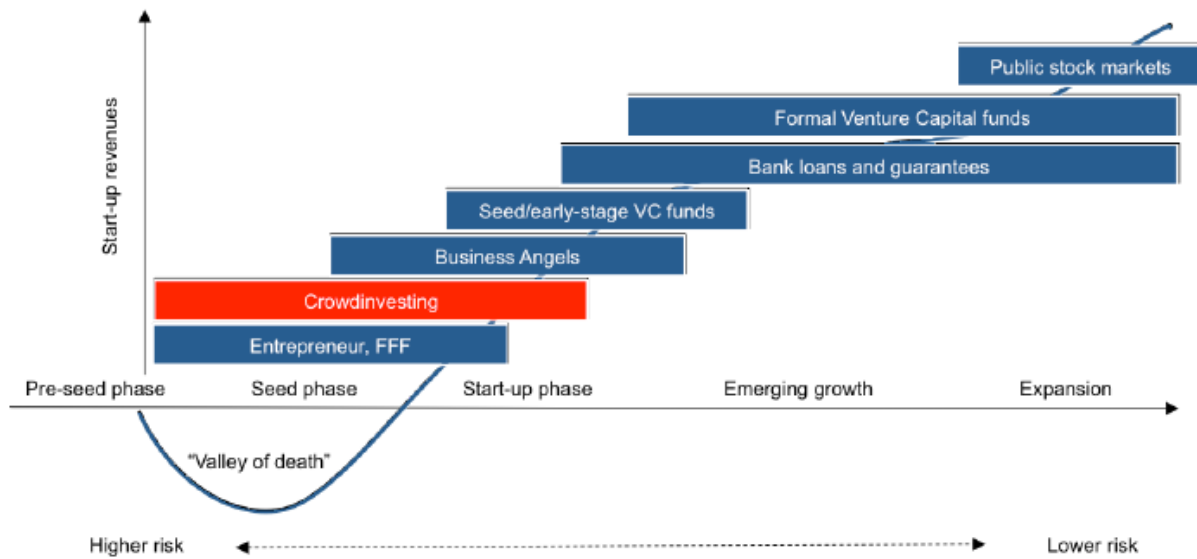


Figure 02: Sources of financing for companies in different stages (Scheder, 2014)

In the beginning stage, crowdfunding was primarily designed for arts and creativity-based industries such as recorded music, film, video games and so on (Agrawal, Catalini, and Goldfarb, 2014). Initially, the basic idea was to raise money through contribution ranging from small to large from large group of people (Bradford, 2011). With this scope, ArtistShare made the first step in 2003 by Brian Camelio where musicians tend to seek donations to produce digital recordings. Later on, this platform evolved into a platform for film/video and photography projects (Freedman and Nutting, 2015). Following the same trend Sellaband entered the market in August 2006 which also represented the arts and creativity-based industries. Where these donation-based platforms were picking up, in 2008 and 2009, two of most popular crowdfunding platforms, Indiegogo and Kickstarter respectively, emerged in the market. These two platforms introduced the reward based financing strategy where funders receive a physical product or service in exchange of their contribution. While the market was having less access to financing sources, the crowdfunding started to gain enormous growth by 2012 and accumulated USD 2.7Bn funding on that year (Green, Tunstall, and Peisl, 2015). Due to different driving forces, the industry has grown at a tremendous rate which is contributing largely in shaping the innovation of every S.P.P.I.C.E. (service, product, project, investment, cause or experience). With this shift in the market, by

2016, there was around 2000 crowdfunding platform working all over the world by providing different facilities all over the world (Drake, 2015). From the below figure from Zeoli (2015), the growth of crowdfunding platform can be seen:

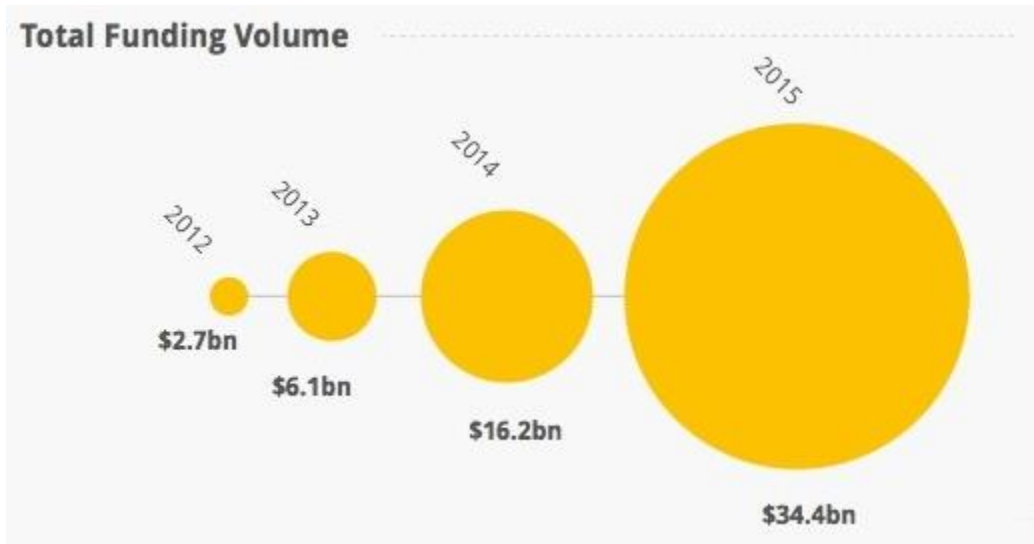


Figure 03: Total Funding Volume by year (2012-2015) (Source: Zeoli, 2015)

The growth of crowdfunding popularity and activities in different parts of the world can be found in the below figure:



Figure 04: Growth by geolocation (Y2015) (Source: Massolution, 2016)

2.2 Different types of crowdfunding

As of today, the crowdfunding industry has seen radical evolution from its beginning at 2003. Though, initially the industry was offered to particular industries and offered particular benefits only, now, the platforms are offering primarily four different benefits to the funders or investors. At the same time, unlike the beginning, these platforms are supporting almost all of the industries as mentioned in S.P.P.I.C.E. (service, product, project, investment, cause or experience). The different benefits offered by the platforms are: Donation, Reward, Lending, Equity, Royalty and Hybrid. From these platforms, lending based platforms are contributing the most to industry by accumulating USD 25.1Bn (72.88%) followed by donation based platforms.

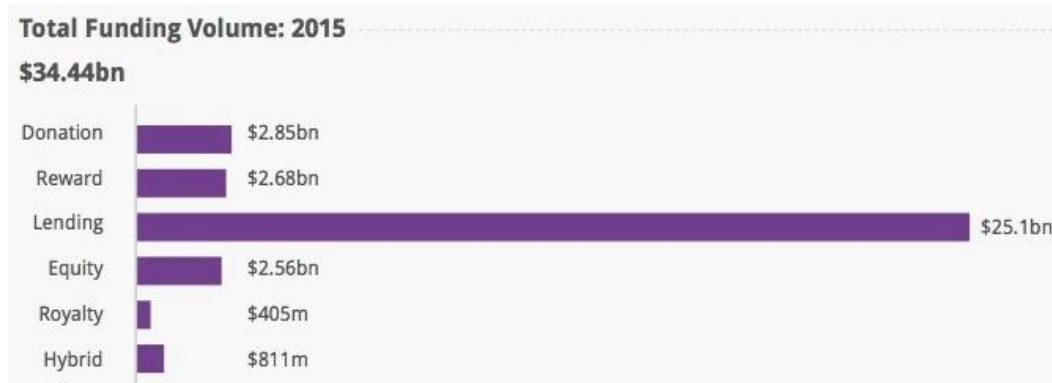


Figure 05: Total Funding Volume by category (Y2015) (Source: Zeoli, 2015)

2.2.1 Donation Based Platform

These platforms or crowdfunding initiatives usually caters philanthropic or social causes. In return, the funders do not receive any physical reward or service as the “donation” word explains it (Giudici et al., 2012 & Belleflamme et al., 2012). In the other words, according to Mollick (2014), this crowdfunding model represents the individuals who acts as philanthropists and who contributes without expecting any direct return for their donations (Mollick, 2014). Usually the social causes or philanthropic causes are very big which is not possible for any one person to resolve. By this donation based system, an individual perceives the personal power over a complex issue which is usually larger than the

individual. Being a part of the cause gives an internal better feeling to that individual (Wojciechowski, 2009). Initially, the crowdfunding industry was operating with only this donation based system (Barnett, 2013). Example of this sort of causes or initiatives can be donations for the cure of Ebola viruses which accumulated total USD 107K as donations where the contributors are not expecting any direct return (Meyskens and Bird, 2015 & CrowdRise, 2015). From the above figure 04 of Zeoli (2015), the contribution of the donation based initiatives to the industry can be found and being at the second position this mechanism is contributing 8.28% (USD 2.85Bn) of the total market.

2.2.2 Reward Based Platform

In these platforms or initiatives, almost all of the industries, products or services are included. At the same time, significant social cause initiatives are seen often in these platforms (Freedman and Nutting, 2015). Furthermore, these initiatives can be separated into two different mechanisms of reward based and pre-sale-based initiatives (Gabison, 2015). Firstly, significant portion of these projects offer rewards (t-shirts, gadgets, benefits) in exchange of the contribution. On the other hand, most of these initiatives are accumulating contributions in exchange of their products or services, this can be considered as pre-sales (Gabison, 2015). By these pre-sales, these projects are reducing the crucial working capital deficit in the primary stage of startup which gives them the edge in moving forward (Frydrych et al., 2014). This mechanism has attracted tremendous people and thus experienced a growth of 524% annually since 2009 (Vulkan, Åstebro, and Sierra, 2016). From the above figure 04 of Zeoli (2015), the contribution of the reward based initiatives to the industry can be found and being at the third position this mechanism is contributing 7.78% (USD 2.68Bn) of the total market. The acceptance of the market can be easily understood from the example of Pebble smartwatch. The owner of the project reached the target of USD 100,000 within two-hours of placing the project. At the end, the project ended up by accumulating USD 10.27Mn from 69,000 funders with around 85,000 unit of pre-sales from that crowdfunding initiative (RAKOWSKA, 2013). That surge has been so influential

that the project ended up selling 400,000 units after that crowdfunding project (D’Orazio, 2014).

2.2.3 Lending Based Platform

By the name itself, it can be understood that these platforms or initiatives offer loan facilities to the project owners. These platforms work as a media of microfinancing where funders can choose projects with an associated rate and date of maturity (Gabison, 2015). According to Bradford (2011) and Mitra (2012), these lending platforms can be separated based on interest rate facilities where some of the platforms pay interest rate and some do not pay. This financing instrument emerged in 2006 in the United States and started offering unsecured loans. These peer-to-peer (P2P) platforms often subject to stricter regulation than the reward based platforms due to the regulation from security exchange commission (SEC) (Freedman and Nutting, 2015). One of the most successful platforms in this area is Lending Club who, as of the end of 2016, has funded total loan worth of USD 24.65 Bn (Lending Club, 2016).

2.2.4 Equity Based Platform

In these platforms, funders receive compensation in the form of equity share of the project. Here, the fundraisers decide how much how much contributions they would like to raise in return of a specific percentage of equity. In this process, each funder receives equity on pro-rata basis which are usually ordinary shares of the company based on their contribution amount (Wilson and Testoni, 2014). These platforms can serve as an efficient media where the fundraisers receive funding from the investors within weeks or months whereas, in a normal scenario, they would have to wait for years for angel or seed investments (Freedman and Nutting, 2015). With the growing trend of equity crowdfunding, it has caught the attention of European market and several new platforms, offering this services, have emerged. Invesdor is one of those emerging platforms who has already served 73 successful funding round accumulating Euro 26.61M (Invesdor, 2016).

Apart from these four major platforms or initiatives, there are other two options as mentioned above. In royalty based platforms or initiatives, funders receive royalty fee in return to their contribution. Sellaband is a perfect example of this sort of platform who allows artists to raise fund for their projects and provide agreed royalty to the funders. In the hybrid platforms, it is possible to offer multiple benefits at a time in a single project such as equity and reward. But basically, as equity model is the most stringent model than others because of the SEC regulations, the platforms have to keep the primary model for equity, then they can add some other options to that.

2.3 Attracting factors of crowdfunding

As mentioned above the growth of the crowdfunding industry has been phenomenal during the past few years. Surely, there are some driving forces that are fostering the growth of the industry as a whole. Taking the view of the whole industry, there can be three major stakeholders who are separately influencing the growth. These stakeholders are market, investors or funders and fundraisers or entrepreneurs.

2.3.1 Market factors

The financing market plays a big role behind the emergence of the crowdfunding industry. When the market became much more stringent than earlier, the scarcity of funding became much more eminent to the project owners. This scarcity acted as a prime obstacle in terms of new technology and service innovation. Block and Sandner (2009) has explained this perspective based on after financial crisis situation. Based on their analysis, after 2008 financial crisis, the venture capital funding reduced by sharp 20%. Furthermore, from bank loan perspective, a research conducted by Ivashina and Scharfstein (2010) showed that loan granting to large borrowers fell by 47% and work in capital loan fell by 14%. As per their analysis, this sort of situations can lead to financing gap or funding gap. This funding gap is pushing fundraisers to opt for alternative financing methods like angel investment and crowdfunding. Due to ease of operation, less regulated system and global reach, fundraisers often tend to choose crowdfunding as their source of fund in the primary stage.

Another impact of the financial crisis is the changes in interest rate of loans. Due to deteriorating situation, banks are charging high interest rate on loans which made the funding situation difficult for the fundraisers. Moreover, from bank's perspective, as they were having less of loans requirements, the funding gap inside the banking industry was rising (DeNederlandsche Bank, 2012). In this situation of high demand and low supply, triggered the funding gap in the industry which made the project owners to think about other alternative financing options that can be availed at a large scale but at cheaper price.

One of the direct impacts of economic crisis is unemployment rate increase. In one news article of OECD.org (2016), they mentioned that due to economic crisis the unemployment rate in the OECD area is expected to rise and reach to a point of 6.3%. In this note, the increment of unemployment rate has a relation with entrepreneurial activities. In the conference paper of Cowling and Bygrave (2011) explained that the previous period's unemployment rate is directly and positively related with entrepreneurial activities. Thus with the increment of new projects, combined with the funding gap, the demand of alternative financing has increased at a great pace.

2.3.2 Funder factors

Funders are those people who contribute or invest in these platforms. There are several motivating factors for this group of people. Due to those factors, these people are participating in the crowdfunding activities and at the same time, contributing to the higher demand of crowdfunding platform.

In these platforms, motivation for funders can be divided into two parts of intrinsic and extrinsic motivation. Here, intrinsic motivation is all about doing something for internal satisfaction and extrinsic motivation is about doing something with the expectation of receiving an outcome or product (Ryan and Deci, 2000).

Becoming a part of a successful cause or S.P.I.C.E. implementation is one of the intrinsic motivations that drives funders (Berglin and Strandberg, 2013). This behavior is explained by Anderoni (1990) with the warm glow theory which indicates that human tends to have

intrinsic motivation for social gain and participation. Seeing it as an investment, the funders may want to receive financial return from it, but the actual situation is somewhat different. As Scheder (2014) has explained in his paper that most of these investors are not planning for any financial return from the project immediately, but in the long run, they want the company to grow and they want to be a part of it.

Unrestricted global investment opportunity is something that can attract a great number of people who wants to receive the cutting edge product or service from any part of the world by investing from home. This also provides early access to new product and services, usually before commercialization. Sellaband, a renowned crowdfunding platform, received their funding from people who are on average 3,000 miles away from the investor (Agrawal, Catalini, and Goldfarb 2014). This means that the global unrestricted investment opportunity has surely attracted a huge portion of the investors. At the same time, easy access and investment without intermediary has been significant in driving the demand of crowdfunding.

Sometimes, herding behavior pulls funders to projects of crowdfunding platform. It means when there is a higher percentage of contribution has been accumulated, the funders tend to think that this project has higher potential, thus investing in it will definitely be a good idea. This usually happens in the ending period of the project (Agrawal, Catalini, and Goldfarb 2014).

Not surprisingly, tax relief can be another motivation for the funders to channel their money into investment platforms. Some of the investors has actually agreed that due to tax relief benefit, they moved to crowdfunding platform to invest in new and better projects. By having invested the money in crowdfunding platform seem more secured than ever to them (Scheder, 2014).

2.3.1 Fundraiser factors

In their paper, Agrawal et al., (2014) described that the fundraisers tend to have two different sets of motivation that caters access to low cost capital and more information about the initiatives. As it is mentioned that due to funding gap, the access to fund new project is quite difficult for start-ups. In this situation, these platforms ensure some capital to run the business with (Rossi, 2014). For low cost capital, there are several factors like better matching with the crowd, bundles of benefits and information about new technology (Agrawal et al., 2014).

Apart from the funding part, more information about the customer demand and feedback can be received in this phase. According to Lauga and Ofek (2009), these information serves as the input of marketing research and later on reduces the variance in post-launch demand. Moreover, these platforms create a mechanism for customer input in terms of product and business plans which helps the project owner to develop the ecosystem around the product in very early stage (Agrawal, Catalini, and Goldfarb, 2014).

Apart from equity crowdfunding, the project owners ended up with full control on the project after successful crowdfunding (Gerber and Hui, 2014). Rather than winding up the control to the investor for the primary stage investment, some project owners considers full control of operation and product as an important factor.

In a nutshell, explained by Green, A., Tunstall, R. and Peisl, T. (2015), fundraisers motivation includes overcoming funding difficulties, reaching and involving crowd, retain the ownership and control, and possibilities of further financing. The benefit framework suggested by them is given below:

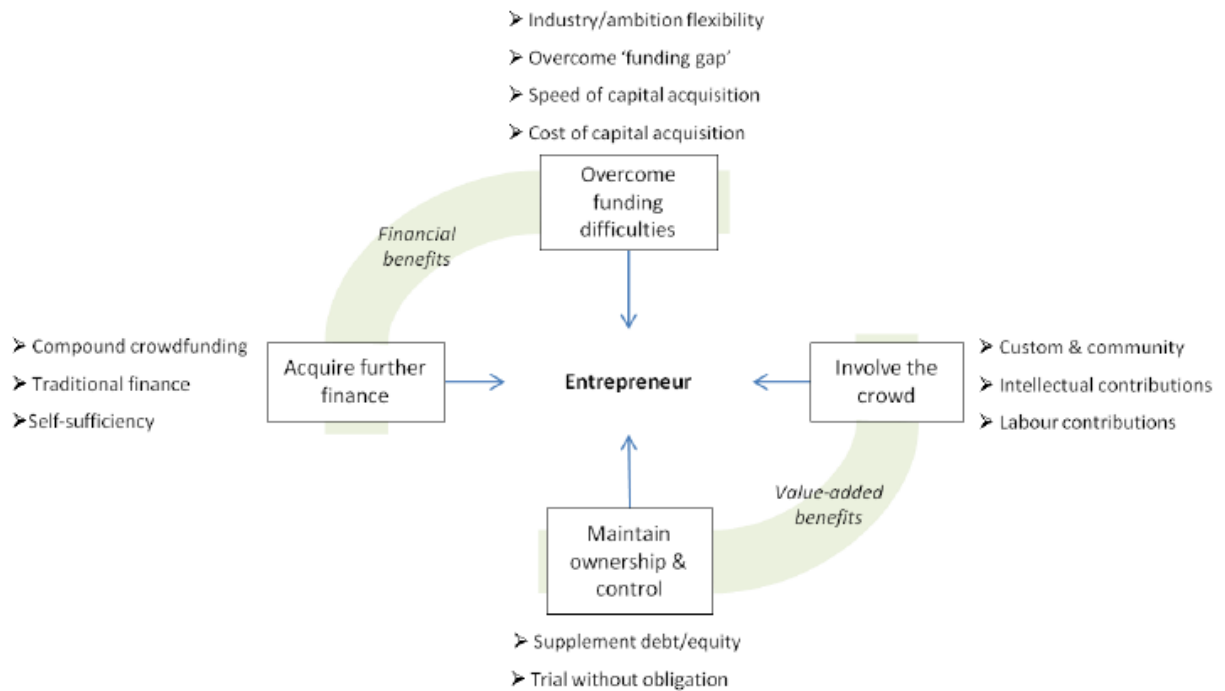


Figure 06: Fundraiser Benefit Framework (Source: Green, A., Tunstall, R. and Peisl, T. 2015)

Apart from all these, marketing opportunity is another motivation through which the project owners are able to market their product internationally from the very early stage of the operation which would not be possible with usual funding practices. Moreover, attracting a great size of investors who shares the same ambition or goal is another motivation here.

3 Research Problem

Crowdfunding, being a new concept from 2003, through ArtistShare, has started emerging at a blazing speed with the establishment of Indiegogo in 2008 and Kickstarter in 2009 (Freedman and Nutting, 2015). Within this period, there has been several studies conducted on this phenomenon. Mainly these studies catered the history of crowdfunding, the reason of crowdfunding emergence, the operating processes of crowdfunding and some influential factors. As suggested by Gerber, Hui, and Kuo, 2012, the motivation for participation in this marketplaces are yet to be researched in proper manner. If the motivating factors of the

participants and driving factor of the industry can be extracted in a combined manner, then the whole picture of the crowdfunding emergence will be presented. The unavailability of the full picture of motivation behind the increasing demand of crowdfunding is working as an inspiration behind this paper. This paper aims to conduct a fundamental exploratory research on the increasing demand of crowdfunding from different point of views by asking:

What are the motivating factors or driving forces behind the increasing growth of crowdfunding?

To answer this question, several sub-questions have to be considered. Thus, in addition to the above mentioned primary research question, this paper will look into these two sub-research questions:

- a. **Investors or funders related:** *Why investors or funders are motivated to participate in crowdfunding activities that drives the demand of the program?*
- b. **Entrepreneurs related:** *Why entrepreneurs are motivated to participate in crowdfunding activities that drives the demand of the program?*

4 Research Methodology

This chapter will discuss about the primary data collection and how those will be implemented to support the research question. The following research method has been used in this paper:

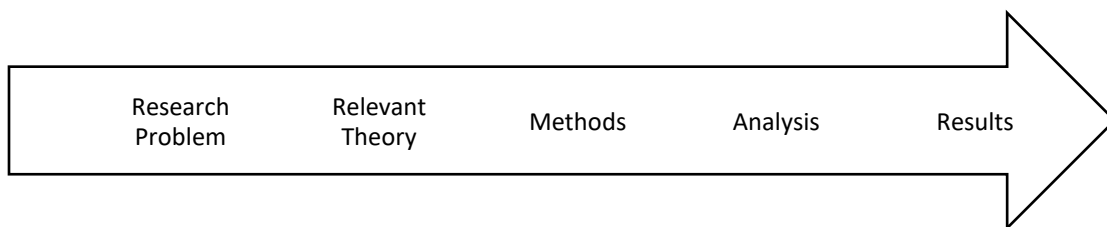


Figure 07: Research method using deductive approach (Source: Saunders et al. 2009)

4.1 Methodological Approach

This research follows an approach towards the methodology which can be summarized and depicted as the below image which is adapted from Biggam, 2008:

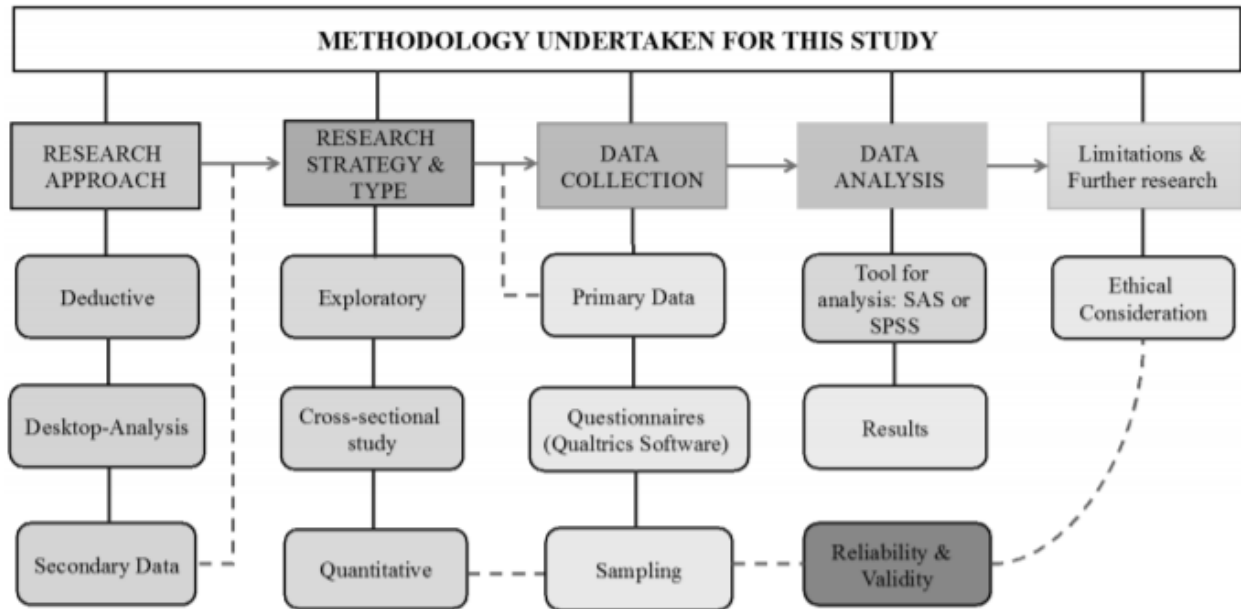


Figure 08: Overview of Research Methodology (Source: Biggam, 2008)

As can be seen from the above figure, it is a summary of the approach of research, strategy and data collection method that has been used in this study. To carry out the research, from different available research option, this study opts for “cross-section study design” which is followed by Quantitative method. As explained by Ghauri and Gronhaug (2009, 68), *cross-sectional study is a kind of study that does not have any control group or the randomization; also in this type, research cause and effect variables are also measured at the same time.* Summing up all this, it is an exploratory research that is solely depending on primary data which is collected from the questionnaire and supported by deductive approach. As explained by Saunders, Lewis and Thornhill (2009), deductive approach associates theoretical based proposition and based on that proposition, further analysis can be built. Figure 07 of this study depicts the steps of deductive approach that this study is going to

follow. However, as mentioned, this study will base primarily on quantitative data and these data will be used to test hypothesis to accept or reject which is built from the theories explained above.

4.2 Design of Research and Collection of Data

As explained by Cooper et al. (2014) that design of the research or study plays a significant role behind fulfilling the study objective and questions related to it. Thus, it serves as the blueprint of the whole research. Complying with the cross-sectional study characteristics, the data of this study has been collected via online questionnaire for quite a prolonged period of time. However, there is a reason behind taking much time for the online questionnaire and that is to achieve diverse response and confirming responses from people who know about crowdfunding. Thus, rather than collecting data from one single point, the university students, and one location, author planned to collect data from various locations of the world and from different people of diverse work areas. Also, as Sekaran et al. (2009) mentioned that cross-sectional study aims to collect sufficient data to find an answer to the research question. The following figure shows the design of the research:

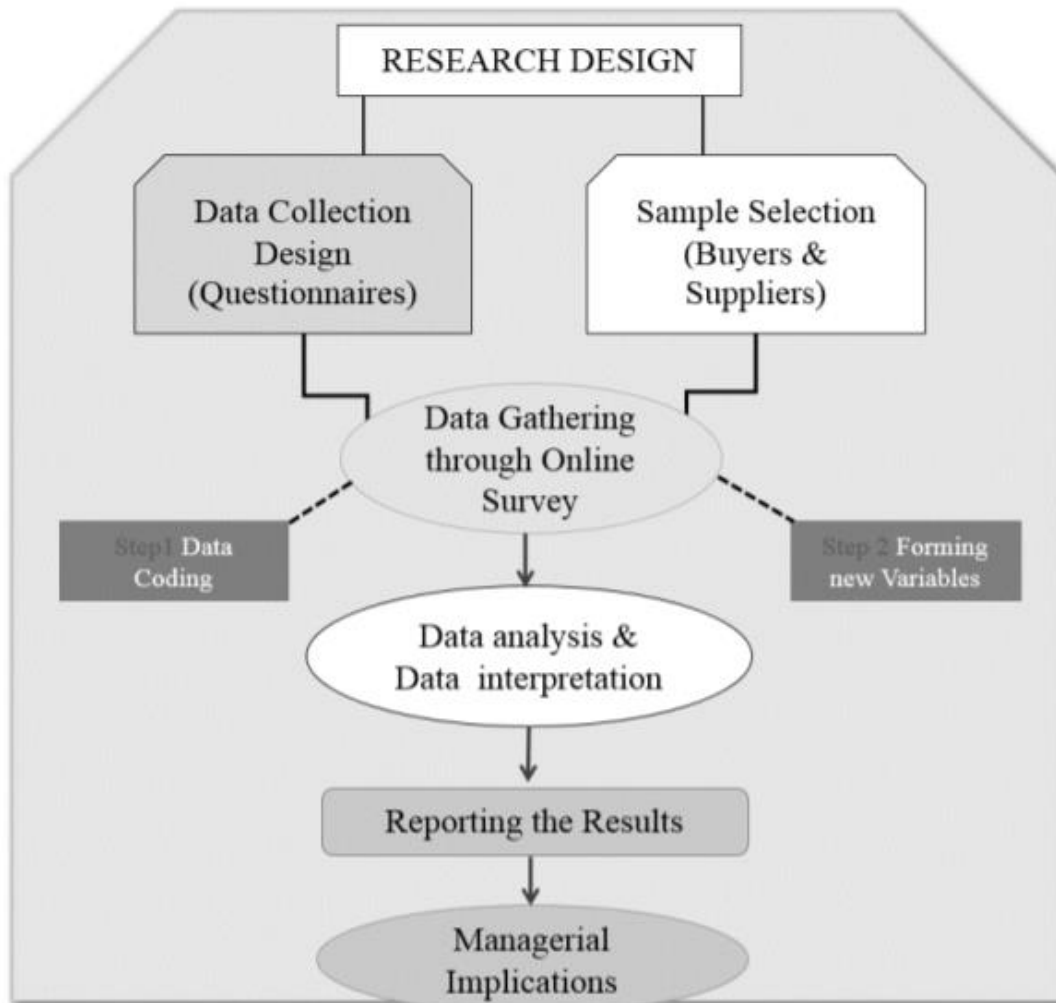


Figure 09: Research Design (Source: Cooper et al., 2014)

As it shows that the research is designed to evaluate data, analyze data, and come up to an implication from analysis. The data of this study is collected in a way from diverse respondents in terms of location, job, and knowledge, which allows to work on human psychological factors that drives them to participate in crowdfunding. Nevertheless, the provided research design includes where the data collected from, how they are analyzed and later on reported based on the analysis.

4.3 Details of Questionnaire

The questionnaire has been designed based on author's own idea. However, the theoretical backgrounds played a big role while creating the question which will later be used as independent and dependent variable. Pretty much all the questions are designed as Multiple Choice Questions which has a range of five responses including: Definitely Yes, Probably Yes, Might or Might Not, Probably Not, Definitely Not. These questions serve as the independent variables which may attract people to participate in crowdfunding activities. There are two other questions which are designed based on ranking to get the probability of participation of that specific individual in crowdfunding activities. Apart from these questions, there are several other questions about the respondents, their preference, their previous activities in crowdfunding, their profession and lastly their location. All these questions combined, this questionnaire provides a detailed view of investor point of view and entrepreneur point of view from different part of the world and different set of people.

After checking up with the mentor, the questionnaire was launched via Qualtrics website and from the beginning it was open for global response. A copy of the questionnaire has been added in Appendix 01 of this study.

4.4 Respondents Statistics

This study plans to get an overview from different people from different profession from different part of the world. That's why, rather than sharing the questionnaire in social media that caters only student of Lappeenranta University of Technology, the author selected email, LinkedIn and Facebook as communication channel to grab global attention. Again, the main reason behind selecting this sample is diversity and an overview of different psychology of human. However, this study restricts to people who knows about crowdfunding, otherwise, the person who doesn't know about this, he may provide data that may alter the result or become the outlier. Due to this practice of selecting different people from different location, the responses of the questionnaire have all unique responses.

The questionnaire was launched on mid-April and it was live for three months. As the author worked in Finance department of a company, the relevant people were contacted via email to participate in this survey. From LinkedIn, different angel investors and venture capital professionals were contacted via messaging. Lastly, Facebook was used to share the questionnaire links publicly via different Facebook and it is quite evident that this source has been the most resourceful. However, the below table presents the overview of the respondents:

Media	Iterations	Respondents	Percentage of total	Incomplete
Email	10	4	6.25%	0
LinkedIn	42	6	9.38%	0
Facebook	N/A	54	84.38%	0
Total		64	100%	0

Table 01: Overview of respondents

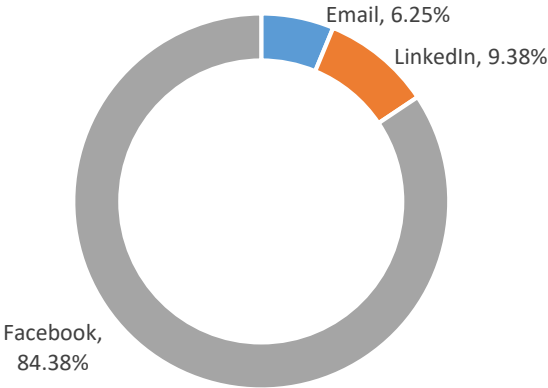


Figure 10: Overview of respondents

5 Empirical Findings

In this part, the results and key findings of this study will be presented, thus it renders the most significance in this whole study. This chapter will include the responses' details from participants using different figures and tables. By the end of this chapter, the reader will have an overview of the questionnaire responses.

5.1 Descriptive Statistics of Questionnaire

In this questionnaire, the author has asked 30 questions to the respondents where 19 questions directly cater to the factors that may have direct influence on the decision of crowdfunding participation. From a birds eye view, all these questions can be divided into three types:

Type 01: Question 1-7 and Question 29-30 are basic questions about the respondents. It includes gender, age, their knowledge about crowdfunding, their interest, previous experience of crowdfunding participation & reason behind it, investment preference, and position.

Type 02: Question 8-20 are directly catering to the factors that concern the investors or funders. Specifically, question 8-19 are the independent factors that may affect the participation in crowdfunding for an individual and question 20 is the probability of the person to participate.

Type 03: Question 21-28 are related to the factors that concern the entrepreneurs who are actively looking for fund to grow their business. Specifically, question 21-27 are the independent factors that may affect the participation in crowdfunding for an entrepreneur and question 28 is the probability of the entrepreneur to raise fund using crowdfunding.

To have a detailed view of the questionnaire, please look at Appendix 01. In total there are 19 independent variables which can be again divided into two separate sections of investors point of view with 12 questions and entrepreneur point of view with 7 questions. However, basic general questions about respondents also may have influence over the crowdfunding

participation decision such as gender, age. All the independent variables questions are multiple choice questions where the answer ranges from Definitely Yes, Probably Yes, Might or Might Not, Probably Not, Definitely Not.

At first, the respondents were asked about their gender and age group. From the below chart, it is quite clearly visible that the respondents were quite diverse in terms of gender and age group where male respondents were 56% and 44% female.

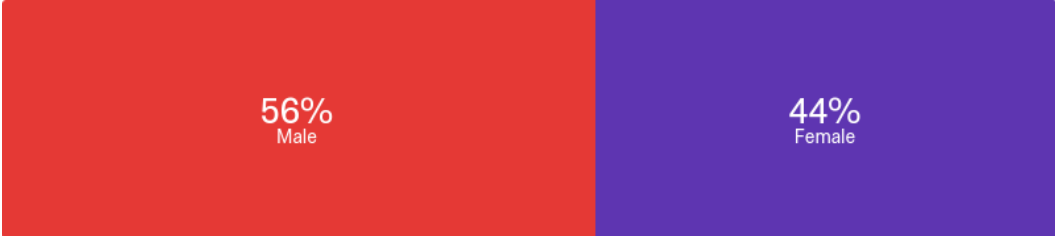


Figure 11: Gender Distribution of the Respondents

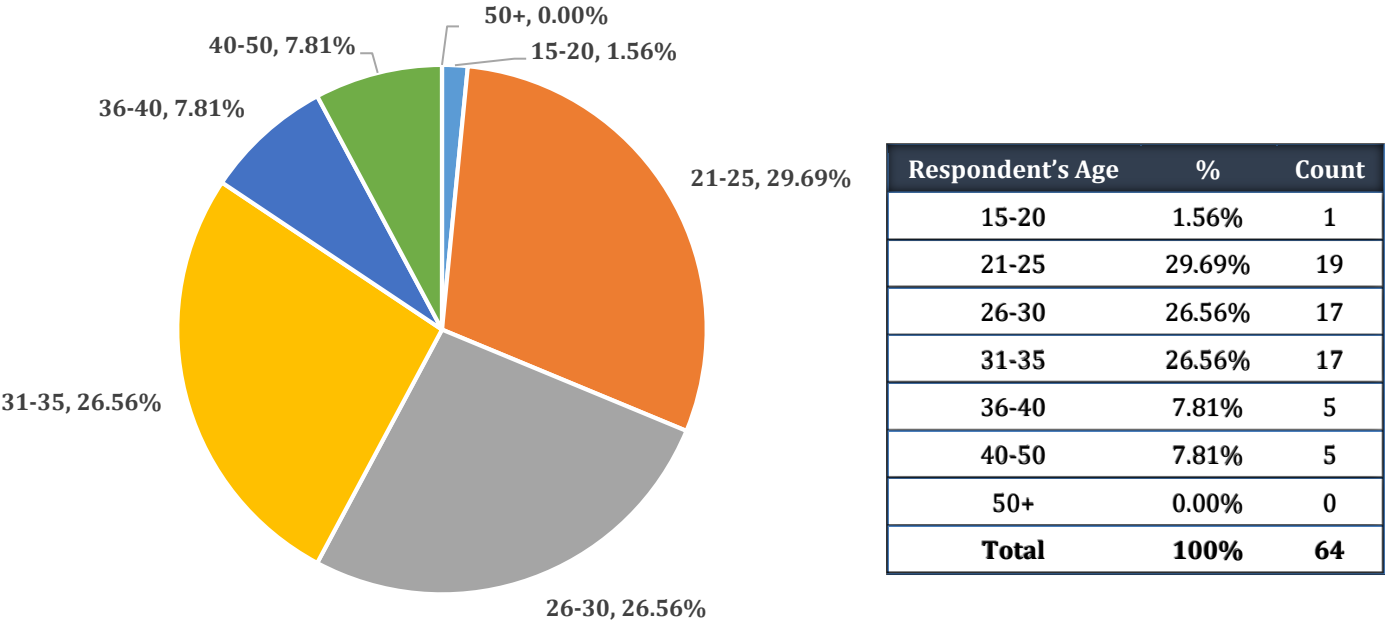


Figure 12: Age Group Distribution of the Respondents

Figure XX shows that almost 83% of the respondent falls under age 21-35 where the whole respondent group is led by age group 21-25 with 29.69% or 19 respondents out of 64.

In the next question, the respondent mentions about his knowledge about the crowdfunding term and its practice in our life. The result shows that there are around 8% people who doesn't know what is crowdfunding, but interestingly around 16% of the respondents not only know about the crowdfunding, but also they already participated in this phenomenon.

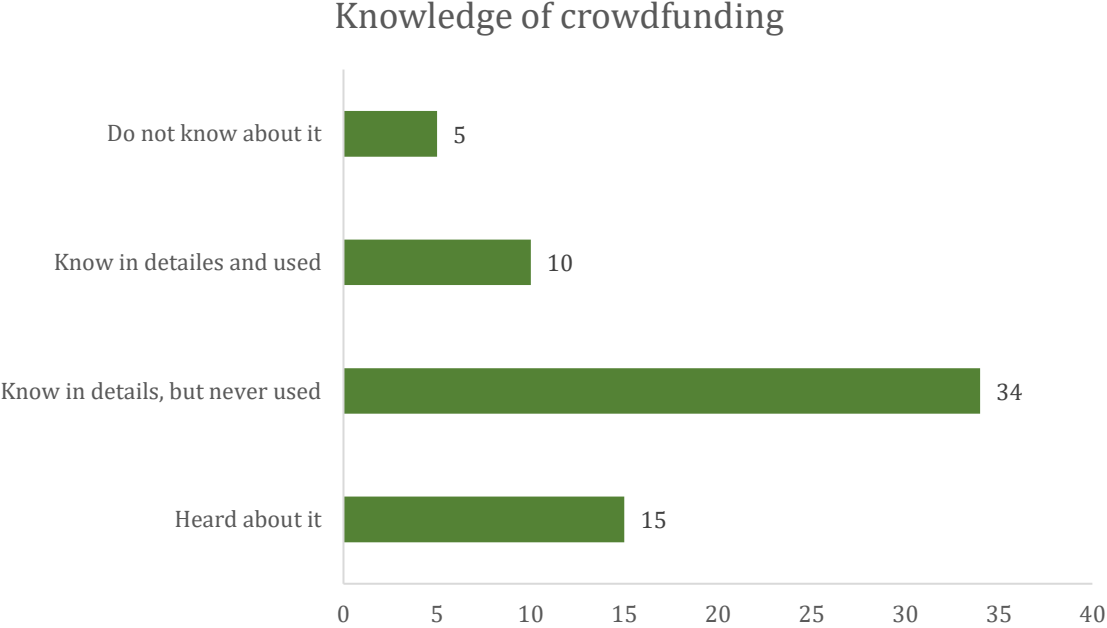


Figure 13: Knowledge of the Respondents about Crowdfunding

Up next, the respondents talked about their interest such as different sectors in which they are interested and have probability to invest on that. Interestingly, the top ranked interests are Technology, Arts and Games. In this era of technology, 70% (45 out of 64) of the respondents are looking out for new technologies which can be easily found in crowdfunding platforms. The below figure will give a detailed view about different interests of the respondents.

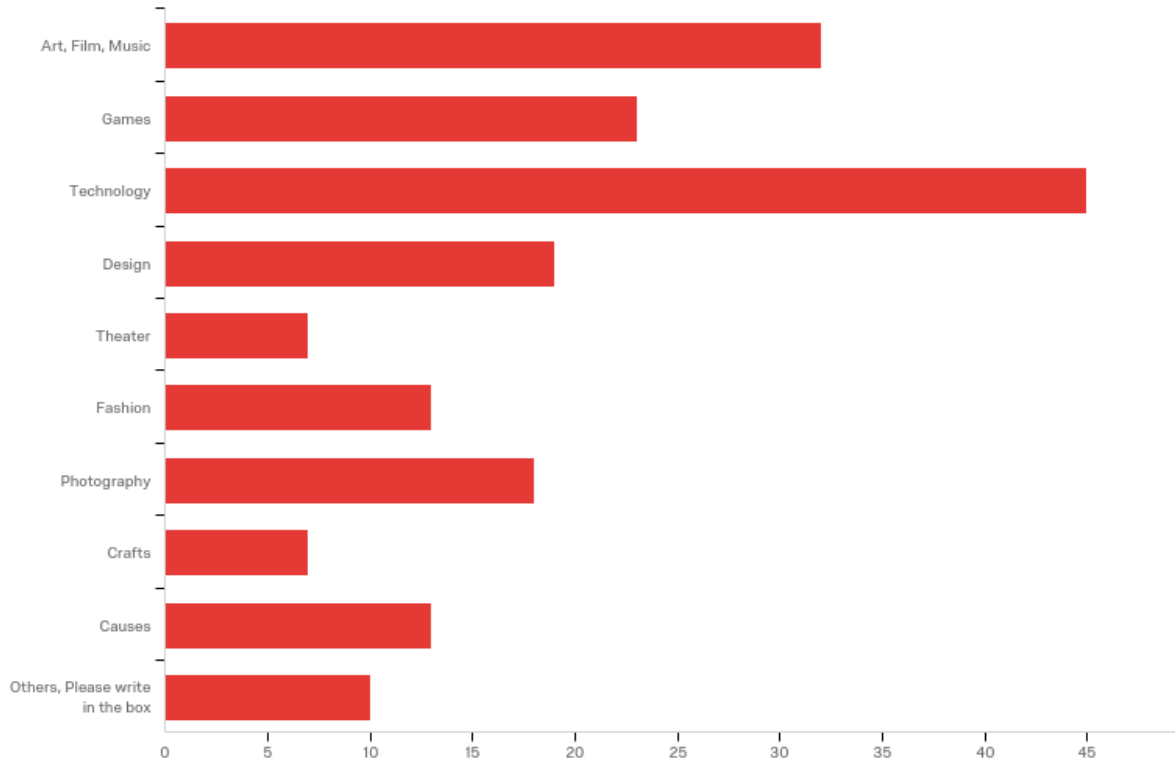


Figure 14: Knowledge of the Respondents about Crowdfunding

However, there are some other opinions about the interests and those includes, microfinance, traveling, sports and personal development.

Having a diverse respondent list provided great result in the next question where they were asked about their previous experience in crowdfunding investment. To the surprise, 33% of the people are found who already invested in crowdfunding activities. It means, in today's generation, at least one-third of the world population is checking the progress of crowdfunding projects and investing their money to receive some sort of benefits. Though it is too early to come to such a conclusion, it surely indicates a positive trend towards this new investment behavior in crowdfunding platforms. The below figure will provide a clear sense about the previous investment activities of the respondents.

Previous Investment Activities

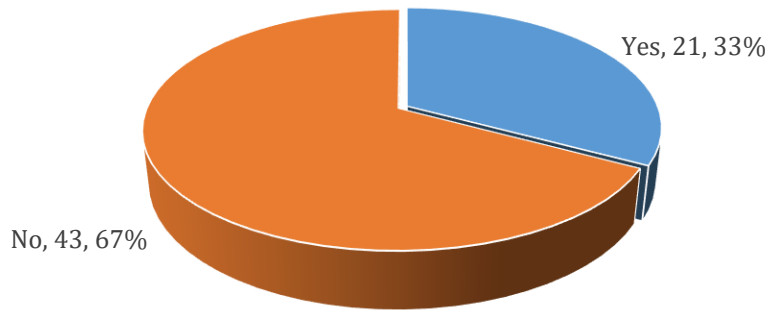


Figure 15: Knowledge of the Respondents about Crowdfunding

The respondents were also asked about the background reason of their participation in crowdfunding activities. Top three reasons include the product innovativeness, entrepreneur support, ease of investment process and availability of great projects to choose from. The below table will provide a view of other reasons involved in this decision making.

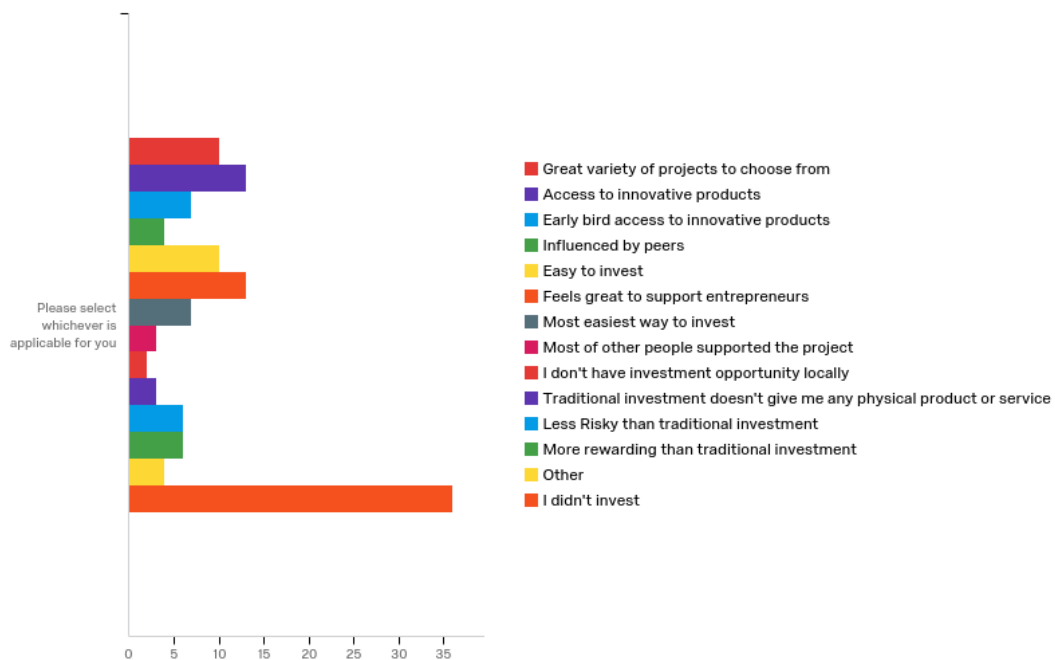


Figure 16: Reasons behind investment

However, there are some other opinions where the respondents mentioned about the reliability of the project, supporting a friend and support to develop a medicine. These reasons provide an indication of the possible factors behind all the crowdfunding activities. In the next question, respondents selected investment in banks is the least risky way followed by lending based and reward based crowdfunding.

To continue after question 7, the respondents were asked 12 different questions concerning the factors that may have influence the decision of participating in crowdfunding activities. As mentioned above these questions are designed with multiple choices with options of Definitely Yes, Probably Yes, Might or Might Not, Probably Not, Definitely Not. To compare these multiple answers, normal bar chart can be very useful. All these 12 influencing factors have been plotted on the following figure based on the questionnaire responses. Some of trends are quite visible from here. Almost all of these factors have at least 40% of the respondents who believe that this factor can influence their participation decision and their response was Definitely Yes or Probably Yes. From a bird's eye view, some of the factors have been topping the chart of most influential factors that may allure investors to crowdfunding and those are Product innovativeness, Ease of Investment process, Product variety and Peer Impact. More than 80% of the respondents think that product innovativeness can be one single factor to allure them where as the rate is around 75% for peer impact and 60% for both Ease of Investment process and Product variety. These are very crucial factors for the investors to consider. However, on the other hand, there are some factors that the respondents considered less important while participating in crowdfunding activities such as Unsuitable local investment situation and feelings. Only around 30% of the respondents think that unsuitable local investment situation can be a reason behind these activities. However, at this point, it is very early to comment on these and a concrete conclusion can be only made after proper statistical analysis.

Factors Motivating Investors

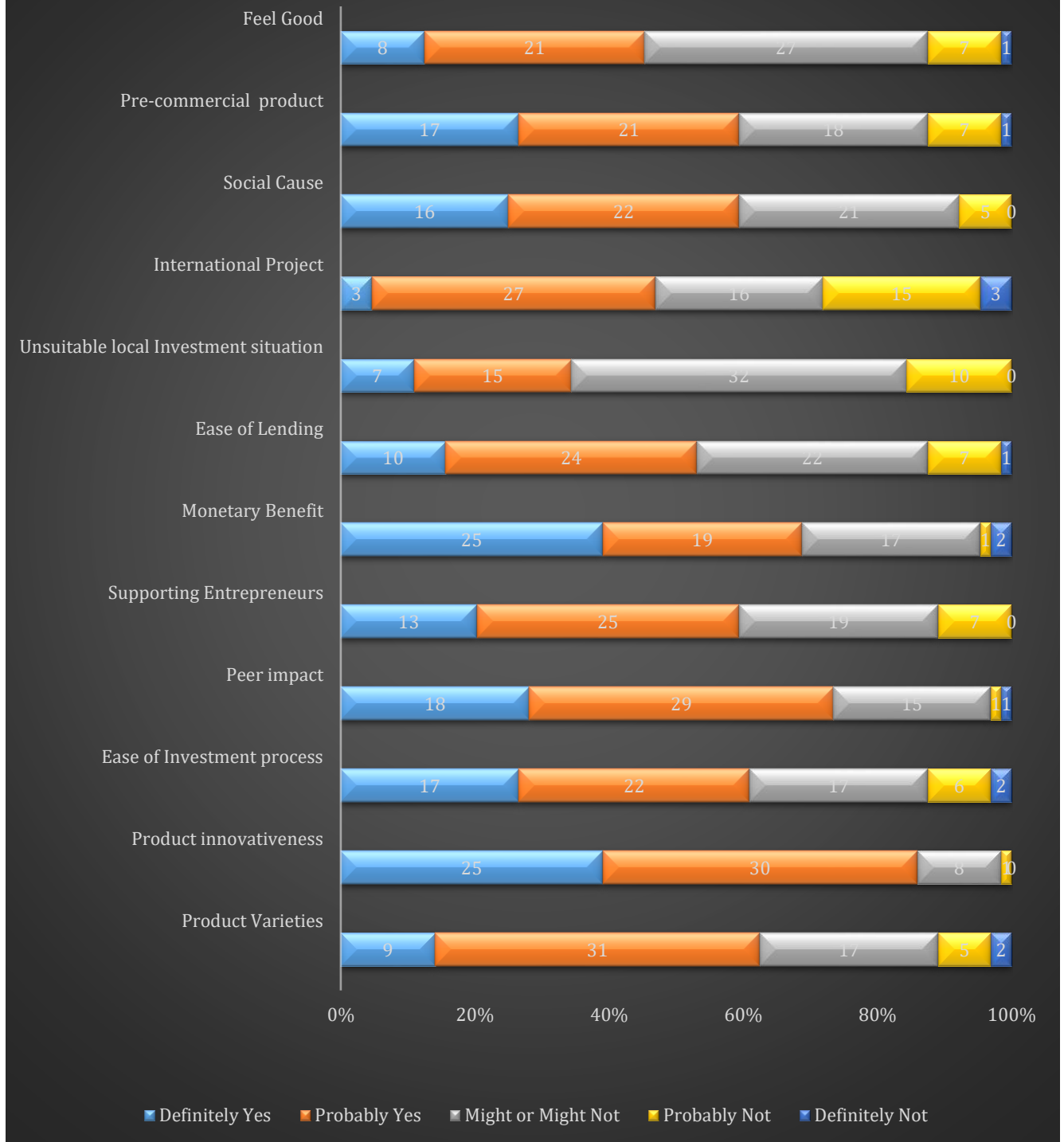


Figure 17: Factors influencing the crowdfunding participation of investors

Considering the above mentioned 12 factors as the independent variables for investors, next the respondents were asked to rate their possibilities of participating in crowdfunding activities on a scale of 1 to 10. The response is pretty clear from the below figure where only 11% respondents scaled down the probability of investing by selecting less than 5 out of 10. However, majority of the people are not sure about investment, but they showed positive responses towards crowdfunding considering the benefit they can yield from this and this case represents almost 70% of the respondents who ranked their probability from 5 to 7 out of 10. It can be seen as a natural indication considering the new development of this sector and lack of proper information to the people about it. The mean of the responses is 6.06.

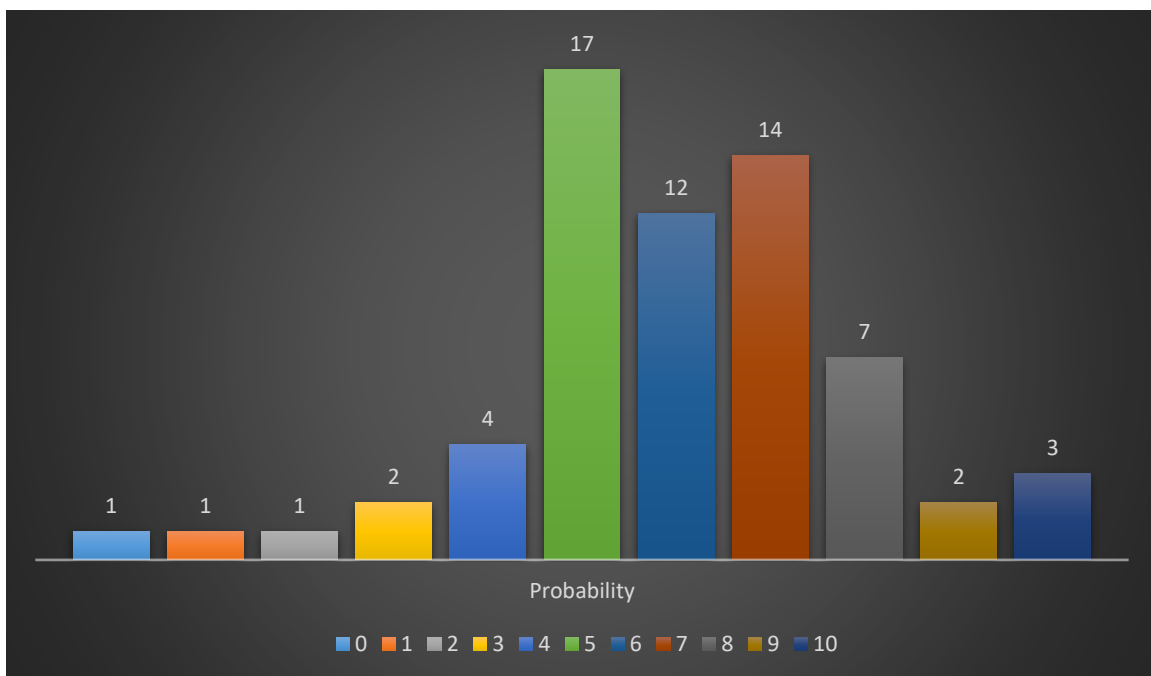


Figure 18: Probability of participating in crowdfunding

Up next, respondents were asked to think from entrepreneur point of view. There were asked 7 questions about the possible factors that may have influence over the entrepreneur's decision of raising fund using crowdfunding platforms. The below figure depicts the responses of these seven questions. Though almost 55% of the respondents think that high interest rate from the available funds can be one reason behind the participation, all other factors have received much higher significance than this. Easy access to investment is the

best factor deemed by the respondents where 80% of the them thinks that this factor has positive influence over the decision of fundraising through these platforms. However, all other five factors also have around 70% of the positive response from the respondents.

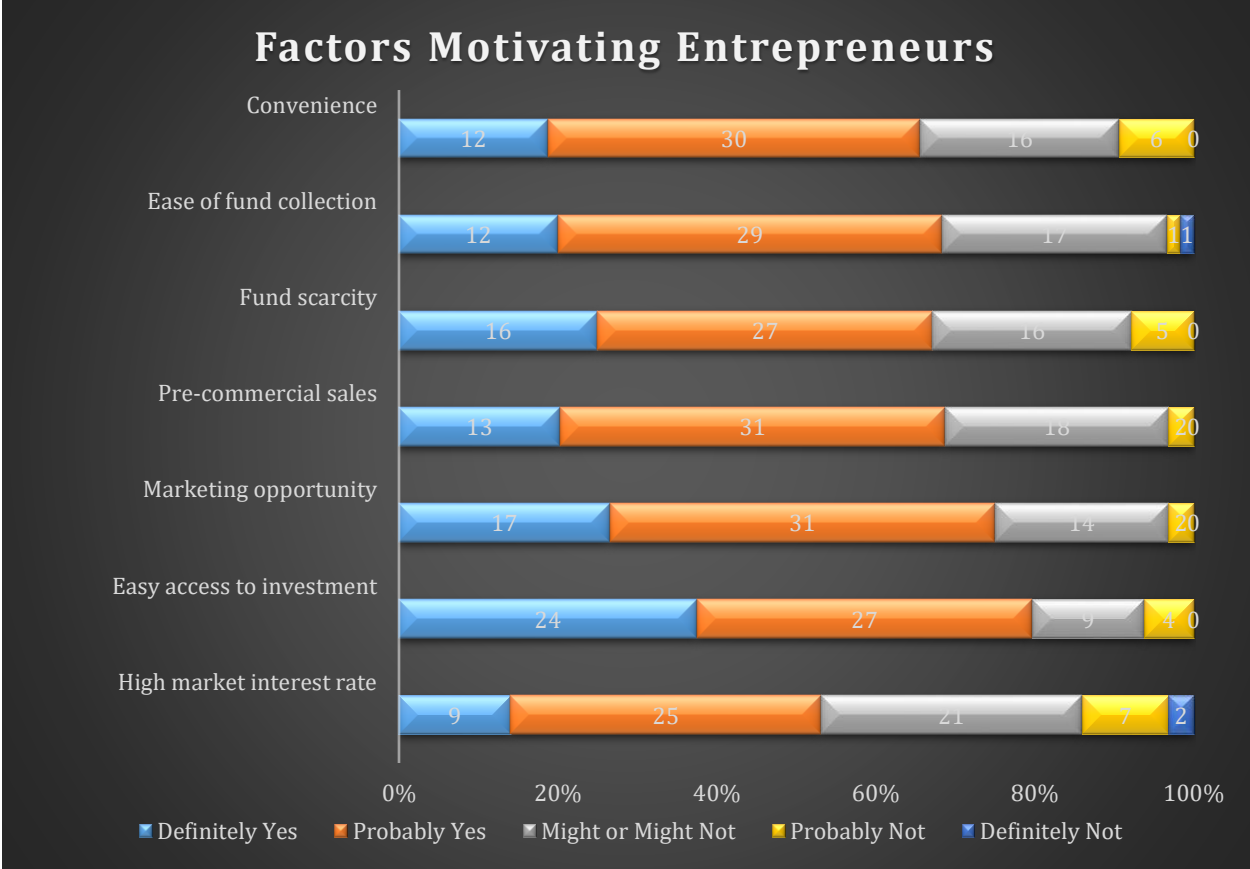


Figure 19: Factors influencing the crowdfunding participation of entrepreneurs

Considering these benefits that the entrepreneurs may yield from crowdfunding platforms, the respondents were asked to be in a situation of entrepreneurs where they have to rate their probability of fundraising using these platforms. As noticed before, the negative responses are quite low to 15% and most of the respondents are in mid-state with 58% responses. The mean of the response is 6.50.

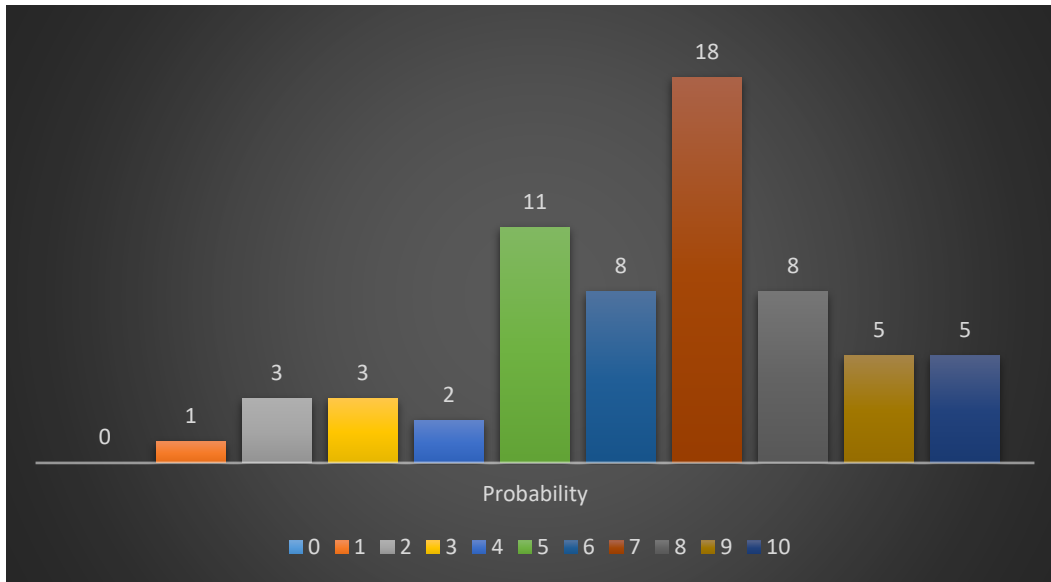


Figure 20: Probability of raising funds from crowdfunding platforms

Lastly, the respondents were asked to share their current occupation and location. This pool of 64 respondents showed a great variety of respondents. Majority portion of the respondents are students and they represent 64% of the total. However, the respondent pool also has 30% people who are currently serving in different companies in different position ranging from software engineer to journalist. Interestingly, there are four persons who are investors and entrepreneurs which is a good support for this study. To understand the great variety of respondents, the list of the countries can be seen. In total, 64 respondents participated from 14 countries which is topped by Finland.

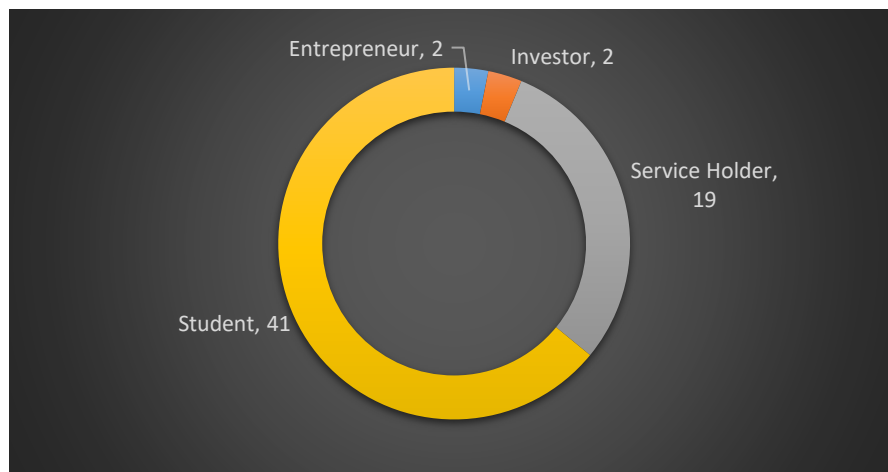


Figure 21: Probability of raising funds from crowdfunding platforms

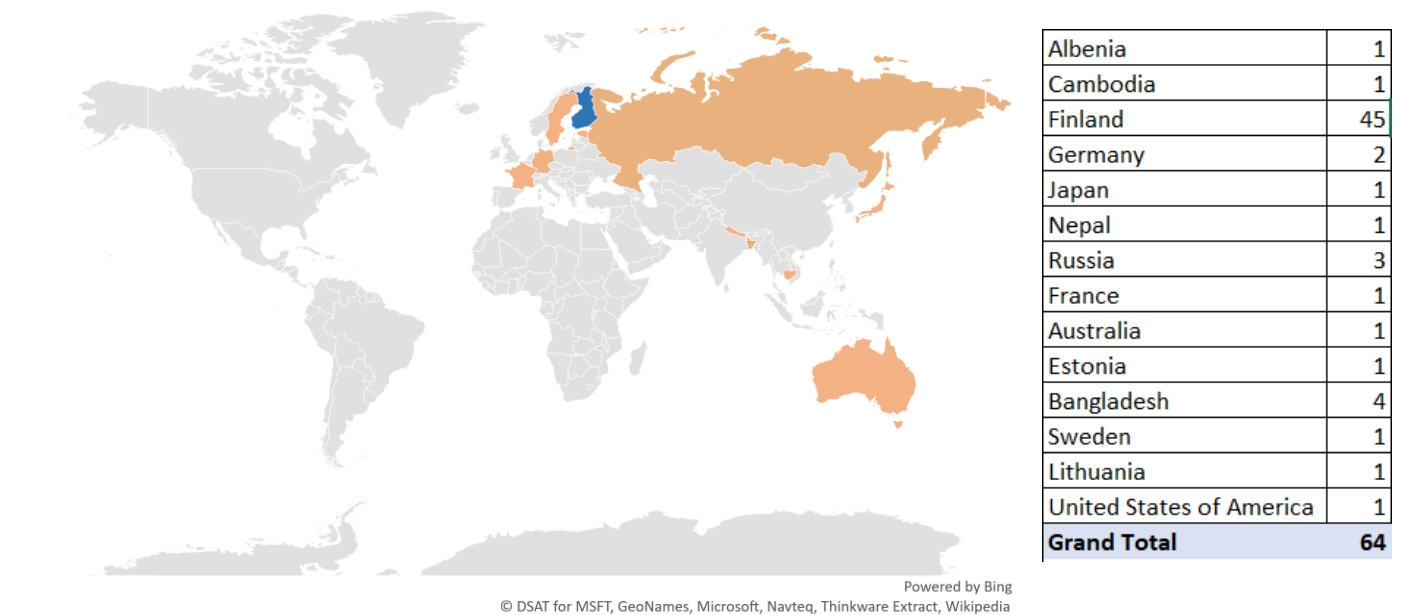


Figure 22: Responses from different countries

6 Data Analysis

For better representation and proper data analysis, it is necessary to conduct data transformation of any sort and take action about missing values. As a matter of fact, there is no missing value, but certainly there are data that must be transformed for further analysis.

As mentioned earlier that the responses of the questions are in multiple choice form. The responses from the respondents should be transformed and coded in a way that suits the analysis requirement.

6.1 Data Transformation

To carry out the data analysis, the responses are transformed. Mainly the dependent variable and independent variable responses are transformed in the same way.

These questions have five possible responses of Definitely Yes, Probably Yes, Might or Might Not, Probably Not, Definitely Not. To assign categorical variable against these responses, these are transformed in below order:

Probably Not & Definitely Not = 0

Might or Might Not = 1

Probably Yes or Definitely Yes = 2

This will leave the whole independent variable set categorized with three categorical variables of 0,1 and 2.

On the other hand, the dependent variable questions include responses on a scale of 0 to 10. While choosing investment decision as only “Yes” and “No”, the responses are transformed as below:

0 to 5 = No = 0

6 to 10 = Yes = 1

Apart from these, there are other variables such as Age, Gender, Previous investment experience which are also transformed with such categorical variables. Moreover, to ease the process of analysis, the variables are coded in short form. Details of the rest of transformation and complete list of coding can be found in Appendix 02.

Now, for this study, based on these categorical variables, logistic regression method has been selected.

6.2 Factors for Investors

As mentioned earlier that there are twelve independent factors for investors and one dependent variable. Based on those the logistic regression is performed. It is modeled based

on the 100% probability of investment. However, based on the data, the positive probability of investment responses account around 60%.

At this point, the goodness of fit of the model has been tested where:

H_0 : the current model fits well

H_A : the current model does not fit well

Firstly, it was tested using Deviance and Pearson Goodness of Fit tests. However, with a **significance level of 10%**, the null hypothesis can't be rejected based Deviance test as the p-value is very high.

Deviance and Pearson Goodness-of-Fit Statistics				
Criterion	Value	DF	Value/DF	Pr > ChiSq
Deviance	37.3877	33	1.1330	0.2745

Table 02: Goodness of Fit tests

Even based on the Likelihood ratio, this model accepts the null hypothesis of being a good model as the p-value is lower than the **significance level of 10%**.

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	42.4801	24	0.0114

Table 03: Goodness of Fit tests

However, the R-squared value of this model explains a little bit more about this fit. The value is 0.4851 which means 48.51% of variance in dependent variables can be explained by these twelve independent variables. Though the value is not a strong indication to a relationship, still 48.51% variance explanation indicates some of these independent variables are significant enough to influence the Investor’s probability of participation.

At this stage, the effects of the independent variables on dependent variable will be analyzed. Using Type 3 Analysis of effects, it can be seen that there are a few independent variables which can be considered significant with a **significance level of 15%**. Among all three significant independent variables, investor10 (Supporting Social Cause) and investor05 (Supporting Entrepreneurs) are the most significant. The other significant variable is investor 11 (Pre-commercialized products). However, Investor 09 (International Project) variable is not significant based on the **15% significance level**, but it is in the borderline significance with a p-value of 0.1516.

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
Investor01	2	0.0538	0.9735
Investor02	2	1.5078	0.4705
Investor03	2	0.8060	0.6683
Investor04	2	1.8594	0.3947
Investor05	2	4.6680	0.0969
Investor06	2	0.0436	0.9784
Investor07	2	0.1662	0.9203
Investor08	2	0.7082	0.7018
Investor09	2	3.7736	0.1516
Investor10	2	4.6979	0.0955
Investor11	2	4.4809	0.1064
Investor12	2	0.2819	0.8685

Table 04: Type 3 Analysis of Effects

From the analysis of maximum likelihood, this analysis of effect can be seen at a deeper scale. In this model, the intercept itself is significant and has a positive impact on the variance explanation of this dependent variable. Moreover, as there are categorical variables assigned to different responses of the independent variables, this below table provides a clear view of the categorical variables of each independent variable and their significance. As the above table shows the effect of the significant independent variables, those variables show the same impact here as well. In fact, this below table shows, how significant these four variables are in terms of influencing the positive decision of participation in crowdfunding activities.

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	2.5522	1.1996	4.5262	0.0334
Investor05	0	1	1.1704	2.5039	0.2185	0.6402
Investor05	1	1	4.7465	2.2516	4.4439	0.0350
Investor09	0	1	-3.3517	1.7500	3.6681	0.0555
Investor09	1	1	-2.6613	1.6980	2.4565	0.1170
Investor10	0	1	2.1157	3.6736	0.3317	0.5647
Investor10	1	1	-3.6569	1.9444	3.5373	0.0600
Investor11	0	1	0.9387	2.1218	0.1957	0.6582
Investor11	1	1	-3.0537	1.4786	4.2654	0.0389

Table 05: Type 3 Analysis of Effects

As can be seen from the above table, investor05, investor10 and investor11 has significant influence towards the positive decision of participation. But surprisingly, investor09 variable has been proven significant in both ways and although the impact of this variable is negative in the whole model as per the coefficients in both ways.

However, to shed some light about the whole model's accuracy while predicting the dependent variable's future value, the ROC curve can be used. This model's ROC Curve has an area of 93.67% under its cover which is excellent.

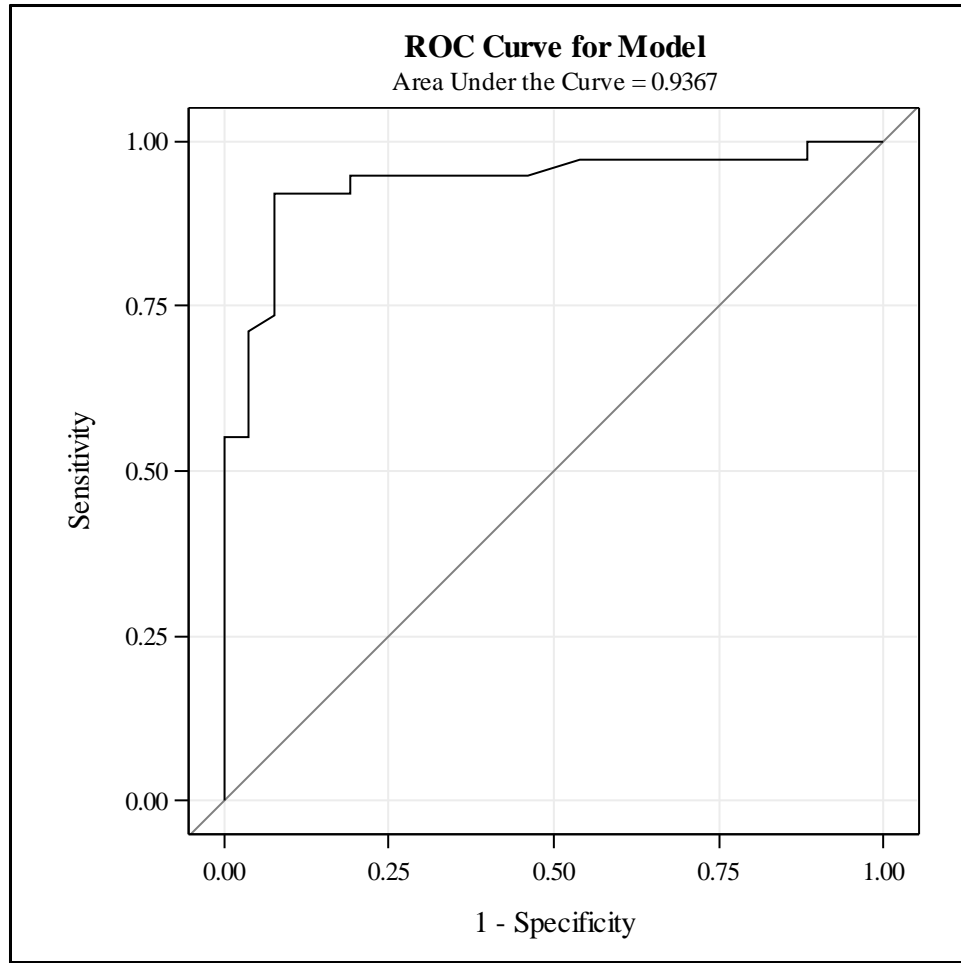


Figure 23: ROC Curve

Overall, the model may not be a perfect image of the crowdfunding driving factors, but it surely does contain some elements which are significant enough to influence the decision of participation. Thus, the null hypothesis of no impact of these factors gets rejected.

6.3 Factors for Entrepreneurs

In terms of the entrepreneurs, there are seven independent factors and one dependent variable. Using the responses on these questions, the logistic regression is performed. It is modeled based on the 100% probability of participation in crowdfunding platforms to raise

funds. However, based on the data, the positive probability of raising funds using crowdfunding responses account around 69%.

At this point, the goodness of fit of the model has been tested where:

H_0 : the current model fits well

H_A : the current model does not fit well

Firstly, it was tested using Deviance and Pearson Goodness of Fit tests. However, with a **significance level of 10%**, the null hypothesis can't be rejected based Pearson test as the p-value is higher than 10%.

Deviance and Pearson Goodness-of-Fit Statistics				
Criterion	Value	DF	Value/DF	Pr > ChiSq
Deviance	33.1685	23	1.4421	0.0782
Pearson	29.8437	23	1.2976	0.1539

Table 06: Goodness of Fit tests

Even based on the Likelihood ratio, this model accepts the null hypothesis of being a good model as the p-value is lower than the **significance level of 10%**.

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	22.1387	14	0.0758

Table 07: Goodness of Fit tests

However, the R-squared value of this model explains a little bit more about this fit. The value is 0.2924 which means only 29.24% of variance in dependent variables can be explained by these twelve independent variables. It is really a low value for this model, however, still 29.24% variance explanation indicates some of these independent variables are significant enough to influence the entrepreneur’s probability of participation.

At this stage, the effects of the independent variables on dependent variable will be analyzed. Using Type 3 Analysis of effects, it can be seen that there are only two independent variables from seven, which can be considered significant with a **significance level of 15%**. Among all these two significant independent variables, Entre04 (Pre-sales to global audience) is the most significant. Another significant variable is Entre07 (Platform Convenience).

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
Entre01	2	0.8811	0.6437
Entre02	2	2.2480	0.3250
Entre03	2	1.7697	0.4128
Entre04	2	6.9892	0.0304
Entre05	2	2.8087	0.2455
Entre06	2	0.0037	0.9981
Entre07	2	5.0240	0.0811

Table 08: Type 3 Analysis of Effects

From the analysis of maximum likelihood, this analysis of effect can be seen at a deeper scale. In this model, the intercept itself is significant and has a positive impact on the variance explanation of this dependent variable. Moreover, as there are categorical variables assigned to different responses of the independent variables, this below table provides a clear view of the categorical variables of each independent variable and their significance. As the above table shows the effect of the significant independent variables, those variables show the

same impact here as well. In fact, this below table shows, how significant these four variables are in terms of influencing the positive decision of participation in crowdfunding activities.

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	1.8973	0.6191	9.3936	0.0022
Entre02	0	1	14.3114	236.0	0.0037	0.9517
Entre02	1	1	-1.7143	1.1442	2.2447	0.1341
Entre04	0	1	-2.7608	2.1637	1.6281	0.2020
Entre04	1	1	-2.8716	1.0892	6.9499	0.0084
Entre05	0	1	-0.5933	1.6192	0.1342	0.7141
Entre05	1	1	1.8068	1.1835	2.3304	0.1269
Entre07	0	1	-2.3859	1.7511	1.8564	0.1730
Entre07	1	1	-2.0637	1.0089	4.1837	0.0408

Table 09: Type 3 Analysis of Effects

As can be seen from the above table, Entre02, Entre04, Entre05 and Entre07 have significant influence towards the decision of participation. But their impact on the decision making varies in this model. It's true that all of these variables are influencing the participation decision to be "Yes"=1. But, the influence type is varying from variable to variable. Entre02, Entre04 and Entre07 are influencing the decision but their impact is negative as shown by the coefficient. Unlike these, Entre05 is showing positive impact to the participation while at the same time being significant.

However, to shed some light about the whole model's accuracy while predicting the dependent variable's future value, the ROC curve can be used. This model's ROC Curve has an area of 82.33% under its cover which is a good result.

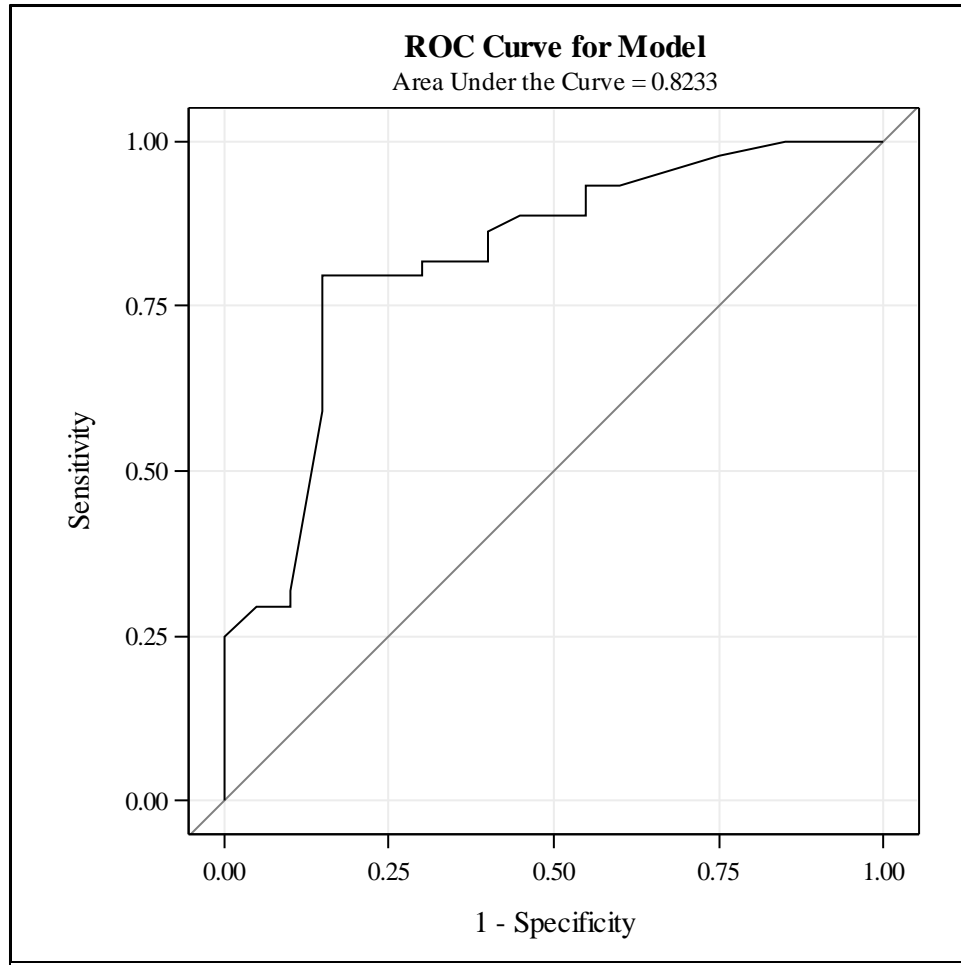


Figure 24: ROC Curve

Overall, the model lacks the proper depiction of the crowdfunding driving factors for entrepreneurs, but it surely does contain some elements which are significant enough to influence the decision of participation. Thus, the null hypothesis of no impact of these factors gets rejected.

7 Discussion & Conclusion

The main objective of this paper was to identify the driving factors behind the participation in crowdfunding activities. The study performed analysis from both investors and entrepreneurs point of view while answering the research questions about the driving factors. In this chapter, the findings from both analyses are combined to answer the research questions and meet the goal of understanding what attracts everyone to take part in crowdfunding activities.

7.1 Discussion

Based on both of these analyses from both investor and entrepreneur point of views, it can be seen there are some significant factors those are influencing the crowdfunding participation decision of general people. Those factors are given below:

Point of view	Factor	Overall Influence
Investor	Supporting Social Cause	Positive
	Supporting Entrepreneurs	Positive
	Access to Pre-Commercialized Products	Positive
Entrepreneur	Pre-sales to global audience	Positive
	Fundraising platform convenience	Positive

Table 10: Significant variables

As it can be seen from the above analyses that supporting social cause and entrepreneurs of different projects are two significant reasons for people to participate in crowdfunding. In both investor and entrepreneur point of view, product or service pre-commercialization is a common factor. It is quite easy to understand as the investors are having access to products or services in advance than any other in the world, whereas the entrepreneurs get to confirm pre-sale of their products and services which provides them a sense of the existing market

condition and demand, hence they can structure their strategies and products better. Last but not the least, convenience of the fundraising platform has been seen as a significant factor that influence entrepreneurs to take part in crowdfunding.

7.2 Limitations

Although the research has found some significant factors that has direct and positive impact on the crowdfunding participation decision, there are some limitations which can be eliminated in further future researches. First of all, the results could have been more improved if the percentage of real life investor and entrepreneur participant was higher than now. Secondly, a total of five factors have been proven significant from both of these analyses from a range of nineteen variables which means a success rate of around 26%. It can be increased by studying people from behavioral finance perspective and combining that to knowledge to crowdfunding activities. Last but not the least, though a dataset from 64 respondents has provided a meaningful result, however, a larger dataset than this would have been much better source of information.

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9 Appendices


9.1 Online Questionnaire


Q1 Your sex

 Male

 Female

Q2 Can you please select your age group?

 15-20

 21-25

26-30


31-35


36-40

40-50

50+

Q3 Have you heard about crowdfunding?

 I have heard about it

 I know crowdfunding, but I have never used it for financing any project

I know crowdfunding and I have used it for financing at least a project.

I do not know what it is

Q4 Please select your interests from the below

Upgrade Account Music



- Games
- Technology
- Design
- Theater
- Fashion
- Photography
- Crafts
- Causes
- Others, Please write in the box

Q5 Have you invested in crowdfunding or supported any project in crowdfunding?



Yes



No

Q6 Why did you invested in crowdfunding projects?



Please select whichever is applicable for you

- | | |
|--|--------------------------|
| Great variety of projects to choose from | <input type="checkbox"/> |
| Access to innovative products | <input type="checkbox"/> |
| Early bird access to innovative products | <input type="checkbox"/> |
| Influenced by peers | <input type="checkbox"/> |
| Easy to invest | <input type="checkbox"/> |
| Feels great to support entrepreneurs | <input type="checkbox"/> |
| Most of other people supported the project | <input type="checkbox"/> |
| I don't have investment opportunity locally | <input type="checkbox"/> |
| Traditional investment doesn't give me any physical product or service | <input type="checkbox"/> |
| Less Risky than traditional investment | <input type="checkbox"/> |
| More rewarding than traditional investment | <input type="checkbox"/> |
| Other <input type="text"/> | <input type="checkbox"/> |
| I didn't invest | <input type="checkbox"/> |

Q7

In your opinion, which investment is most risky? (Drag the options to rearrange the risk orders where Rank 1 is the least risky and 5 being the most risky)



- | | |
|---|---|
| Traditional investment in banks, equity and so on | 1 |
| Investing in a lending based crowdfunding | 2 |
| Investing in a reward based crowdfunding | 3 |
| Investing in a donation based crowdfunding | 4 |
| Investing in a equity based crowdfunding | 5 |

Q8

Do you think variety of products is a reason for people to invest in crowdfunding?



- Definitely yes
- Probably yes
- Probably not
- Definitely not

Q9

Do you think innovative products is a reason for people to invest in crowdfunding?



- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

Q10

Do you think convenience in terms of investing is a reason for people to invest in crowdfunding?



- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

Q11 Do you think peer influence (investing in a product because a large number of people already invested and happy with the progress so far) is a reason for people to invest in crowdfunding?



- Definitely yes
 - Probably yes
 - Might or might not
 - Probably not
 - Definitely not
-

Q12 Do you think supporting entrepreneurs for social benefit is a reason for people to invest in crowdfunding?



- Definitely yes
 - Probably yes
 - Might or might not
 - Probably not
 - Definitely not
-

Q13 Do you think expecting monetary benefit, physical goods and service in exchange of investment is a reason for people to invest in crowdfunding?



- Definitely yes
 - Probably yes
 - Might or might not
 - Probably not
 - Definitely not
-

Q14 Do you think ease of lending and better lending terms is a reason for people to lend or invest in crowdfunding?



- Definitely yes
 - Probably yes
 - Probably not
 - Definitely not
-

Q15

Do you think unsuitable or restricted local investment situation is a reason for people to lend or invest in crowdfunding?



Definitely yes

Probably yes



Might or might not

Probably not

Definitely not

Q16

Do you think opportunity to invest in an international project is a reason for people to invest in crowdfunding?



Definitely yes

Probably yes



Might or might not

Probably not

Definitely not

Q17

Do you think supporting a social or humanitarian cause is a reason for people to invest in crowdfunding?



Definitely yes

Probably yes



Might or might not

Probably not

Definitely not

Q18

Do you think people invest in crowdfunding for receiving new technology product or service before commercialization at a cheaper price?



Definitely yes

Probably yes



Might or might not

Probably not

Definitely not

Q19

Do you think people gain good inner feeling or inner peace by investing in crowdfunding projects?



- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

Q20

As an investor, considering all the benefits and scarcity of funding, in a scale of 1 to 10, how much do you like to invest in crowdfunding projects?



Definitely not Probably not Might or might not Probably yes Definitely yes

Likelihood of participating



Q21

From entrepreneurs point of view, do you think unfavorable interest rate is a reason for project owners to choose crowdfunding?



- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

Q22

From entrepreneurs point of view, do you think easy access to investment from global audience is a reason for project owners to choose crowdfunding?



- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

Q23 From entrepreneurs point of view, do you think marketing opportunity to global audience is a reason for project owners to choose crowdfunding?



Definitely yes

Probably yes

Might or might not

Probably not

Definitely not

Q24 From entrepreneurs point of view, do you think product or service pre-sales to global audience is a reason for project owners to choose crowdfunding?



Definitely yes

Probably yes



Might or might not

Probably not

Definitely not

Q25 From entrepreneurs point of view, do you think scarcity of fund from traditional source like banks, angel investors, venture capital is a reason for project owners to choose crowdfunding?



Definitely yes

Probably yes



Might or might not

Probably not

Definitely not

Q26 From entrepreneurs point of view, do you think ease of investment collecting is a reason for project owners to choose crowdfunding?



Definitely yes

Probably yes



Might or might not

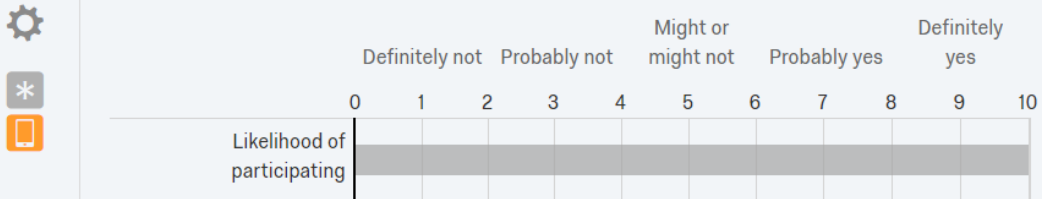
Probably not

Definitely not

Q27 From entrepreneurs point of view, do you think convenience of platforms is a reason for project owners to choose crowdfunding?

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

Q28 As a project owner, considering the benefits and scarcity of funding, in a scale of 1 to 10, how much do you like to participate in crowdfunding to gather investments?



Q29 If you want to add something else

Q30 One last question, please mention your occupation and position that you are holding.

9.2 Transformed and Coded Data

Coded Variable	Question	Response	Transformed Response
Gender	Gender	Male	1
		Female	2
Age	Age Group	15-20	1
		21-25	2
		26-30	3
		31-35	4
		36-40	5
		40-50	6
		50+	7
Invested	Have you invested in crowdfunding or supported any project in crowdfunding?	Yes	1
		No	2
Investor01	Do you think variety of products is a reason for people to invest in crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor02	Do you think innovative products is a reason for people to invest in crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor03	Do you think convenience in terms of investing is a reason for people to invest in crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor04	Do you think peer influence (investing in a product because a large number of people already invested and happy with the progress so far) is a reason for people to invest in crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor05		Definitely yes	2

	Do you think supporting entrepreneurs for social benefit is a reason for people to invest in crowdfunding?	Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor06	Do you think expecting monetary benefit, physical goods and service in exchange of investment is a reason for people to invest in crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor07	Do you think ease of lending and better lending terms is a reason for people to lend or invest in crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor08	Do you think unsuitable or restricted local investment situation is a reason for people to lend or invest in crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor09	Do you think opportunity to invest in an international project is a reason for people to invest in crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor10	Do you think supporting a social or humanitarian cause is a reason for people to invest in crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor11	Do you think people invest in crowdfunding for receiving new technology product or service before commercialization at a cheaper price?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Investor12	Do you think people gain good inner feeling or inner peace by investing in crowdfunding projects?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0

		Definitely not	0
Invest_probab	As an investor, considering all the benefits and scarcity of funding, in a scale of 1 to 10, how much do you like to invest in crowdfunding projects?	0-5	0
		6-10	1
Entre01	From entrepreneurs point of view, do you think unfavorable interest rate is a reason for project owners to choose crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Entre02	From entrepreneurs point of view, do you think easy access to investment from global audience is a reason for project owners to choose crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Entre03	From entrepreneurs point of view, do you think marketing opportunity to global audience is a reason for project owners to choose crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Entre04	From entrepreneurs point of view, do you think product or service pre-sales to global audience is a reason for project owners to choose crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Entre05	From entrepreneurs point of view, do you think scarcity of fund from traditional source like banks, angel investors, venture capital is a reason for project owners to choose crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Entre06	From entrepreneurs point of view, do you think ease of investment collecting is a reason for project owners to choose crowdfunding?	Definitely yes	2
		Probably yes	2
		Might or might not	1
		Probably not	0
		Definitely not	0
Entre07	From entrepreneurs point of view, do you think convenience	Definitely yes	2
		Probably yes	2

	of platforms is a reason for project owners to choose crowdfunding?	Might or might not	1
		Probably not	0
		Definitely not	0
Entre_probab	As an project owner, considering the benefits and scarcity of funding, in a scale of 1 to 10, how much do you like to participate in crowdfunding to gather investments?	0-5	0
		6-10	1