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**Erasmus School of Economics**

Master thesis: Economics and Business, Marketing

*“Type of rewards in crowdfunding campaigns and individual behaviour determinants as an influence on consumers’ willingness to pay in the movie industry”.*

**Name student:** Griselda Delija

**Student ID number:** 534034

**Supervisor:** Dr. Agapi Thaleia Fytraki

**Second assessor:** -

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The views stated in this thesis are those of the author and not necessarily those of the supervisor, second assessor, Erasmus School of Economics or Erasmus University Rotterdam.

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## **Abstract**

Crowdfunding projects especially in movie sectors have a major growing potential in the market. To get successful results, it is important to fathom the use of various factors that might influence the intention of customers to invest in such projects. This thesis will investigate the effect of crowdfunding campaign reward types and individual behaviour determinants on willingness to pay in the movie sector. To answer this question, an experiment is conducted where participants are presented two different crowdfunding movie campaign scenarios. One of the groups is displayed a tangible reward and the other group an intangible reward. Additionally, this research examines mediating roles of perceived risk, perceived trust, project attachment and project viability. Based on different literature, hypotheses are created and tested using data through a structured questionnaire administered to a randomly assigned sample, and analysed through descriptive, ANOVA, regression, and mediation analysis. The results retrieved from this research show that participants are more willing to pay for a crowdfunded project if the reward is tangible rather than intangible. Perceived trust is the only mediating effect that is significant, meaning that participants invest more if they trust the project and their trust increases more when the reward is tangible rather than intangible. Lastly, project viability positively affects willingness to pay for a crowdfunded project. The other mediating effects are insignificant.

## **Introduction**

### **Introduction**

As the world of digitalization is emerging at a fast pace, alternative ways to invest and finance different projects, innovations and products are needed in the market. Crowdfunding is one of these alternatives that has been used recently as a more open solution where consumers can discuss and evaluate before investing in a project. The definition of crowdfunding can be explained as a financing technique where entrepreneurs can develop new ideas, products, and innovations online in return for financial funds from anonymous individuals that decide to invest (Shin, & Lee, 2020). Crowdfunding uses different web technologies and existing online payment systems so that anyone can pitch their ideas on the various available platforms, such as RocketHub, Kickstarter and GoFundMe (Gerber, Hui, & Kuo, 2012). There are four different types of crowdfunding (CF): donation-based CF, reward-based CF, lending-based CF and equity-based CF (Gierczak, Bretschneider, & Leimeister, 2014). This paper is going to be focused on reward-based CF, where consumers that decide to invest in a certain project receive a type of non-financial reward back.

These platforms have seen an increase in popularity in all fields starting from tech products, sports, art, music, tourism, and movies. There are various examples where movies have gained large amounts of return from CF such as Veronica Mars, and American movie that was funded with 5.7 million USD on Kickstarter in 2014 (Baber, & Fanea-Ivanovici, 2021). However, not everyone is successful in this market. Because of fierce competition, most directors that want to make their pitch in filmmaking turn to film crowdfunding as a solution but sometimes they can fail to grab investors' attention. Some factors that usually play a role are perceived risk, perceived trust (Baber & Fanea-Ivanovici, 2021; Huang, 2020), project description, content, and reviews (Chen, Chang, Chen & Chuang, 2022).

However, there are several factors that have not yet been discussed regarding the connection between the rewards one chooses to provide and the behaviour of consumers. Exploring motivations behind consumers decision to donate and invest in future movie projects will help future entrepreneurs to understand investors' behaviour.

## Research problem & motivation

The main problem with crowd-funded projects is soliciting the funds needed for the project to be successful, as it is highly dependent on consumers' decision-making. It is estimated that the overall rate of project failure is around 40% (Chen, 2021). This becomes even more complicated for independent movie makers as this industry in general is very costly (Braet, Spek, & Pauwels, 2013). A possible solution to this problem would be understanding the main factors that influence investors and consumers' willingness to invest. Various academic papers analysed factors such as the role of the founder of the project, including their experience, network, language used, competition (Chen, 2021), perceived trust and perceived risk regarding the movie industry (Baber & Fanea-Ivanovici, 2021). This paper will try to fill knowledge gaps by adding potential influencers in the models previously used in existing academic papers.

Firstly, the main variable that is going to be studied in this paper is the type of reward that CF projects offer to investors. Wei Shi (2018) emphasizes that creating a very effective reward system can have a major impact on CF investment, but it continues to be a major challenge. Moreover, it is concluded that material rewards are better received than non-material ones (Wei Shi, 2018).

Huang (2020) discusses the relationship between a film fan's willingness to pay in a material and non-material reward scenario in crowdfunding. The paper further includes mediating variables such as perceived convenience and risks, and moderating effect of individual characteristics (gender, age, income, monthly investments, expenditure). It is concluded that perceived risk has a significant effect on the willingness of consumers to be involved in CF projects regarding a movie when a material reward is provided. Similarly, Baber & Fanea-Ivanovici (2021) analyse the main intentions that consumers have to crowdfund movies and web series in exchange of capital share as a reward, an effect mediated by perceived risk and trust. They conclude that both perceived risk and trust positively affect the involvement of consumers in CF, which contradicts the prior research. For this reason, this paper is going to further analyse the mediating effect of perceived risk and trust in relation to the willingness to pay in a reward-based CF. Moreover, the relationship between consumer trust and crowdfunding participation intention is investigated by Shin & Lee (2020), where they find a significant positive effect between the two. Herrero, Hernández-Ortega & San Martín (2020) expand the model in reward-

based CF by analysing the influence of project attachment and business viability in funders' behavioural intentions where a significant affect is found in both. As an addition the model presented by Baber & Fanea-Ivanovici (2021) and Huang (2020), this paper is going to add project attachment and business viability as possible mediator factors that might influence the intention of consumers to be involved in crowdfunding. This effect has not been explored yet in the movie industry so it would be a contribution to the existing academic research.

## **Research objectives**

The aim of this paper is to analyse how different types of rewards can influence an investor's willingness to contribute to projects posted in crowdfunded webpages. The type of reward that the project founder decides to give would have a significant effect in the willingness of individuals to pay for them. Wei Shi (2018) distinguishes two types of rewards which are material and symbolic and states that material reward serve more effectively short-term perspective whereas the symbolic ones will be more effective in the long-term perspective. They create a model based on data gathered through crowdfunding databases. This paper on the contrary will follow an experimental model such as the models of Salem, Elkhwesky, Baber and Radwan (2022) where a simulated campaign is shown to the participants.

However, there are various other factors that might influence the relationship between crowdfunded campaigns such as the perceive risk and trust that individuals might have towards the quality and the founder of the project. This paper will attempt to analyse this affect based on the reward system that the campaign offers. As mentioned before, there is a contradiction in results from prior research. This paper will contribute to existing research by revisiting prior methods applied and comparing the results.

Moreover, two other mediators will be involved in the model which are project attachment and project viability. Project viability relates to the conception of identification and evaluation that consumers might have over projects in the market whereas project attachment can be explained as the intrinsic motivation (interest, engagement, curiosity etc) that consumers have over the projects (Herrero, Hernández-Ortega & San Martín, 2020). They conclude that both variables have a positive influence in the intention to participate in CF. Thus, based on this

analysis this paper is going to analyse these effects in a movie setting campaign since it has not done before. Thus, the main objective of this thesis is:

*Research question: What is the effect of crowdfunding campaign reward types and individual behaviour determinants on willingness to pay in the movie industry?*

The answer to this research question will provide academic and managerial contribution. Studying reward types and individual behaviour determinants that might have an impact on the willingness to contribute to crowdfunding campaigns would draw conclusions on how CF financing should be done and what factors should be considered in the process. Moreover, the results of the experiment can be used by other academics to further develop and analyse the concept of crowdfunding. Finally, the reward system in movie industry is a topic that has not been studied extensively by academia, thus the results of this paper would contribute and add to existing literature.

On a managerial perspective, crowdfunding can be used by different stakeholders in the movie industry. The results could benefit movie producers, entrepreneurs, marketers, and crowdfunding sites by helping them maximise the contribution level towards their projects. Through these results, they could analyse the effect of different rewards and other behavioural determinants on willingness to contribute and further help with financing the project. The movie projects' stakeholders could also use the results of this paper to create new business models and use crowdfunding as an alternative to finance the production.

## **Research methodology**

For the aim of this investigation, a specific experimental procedure is chosen through a survey. By utilising a between subject experimental design, this allows the investigation to accurately compare the treatment and control groups (in this case by means of a survey) and hence, estimate the treatment effect. The study will target young-mid aged individuals mainly from the Netherlands, and it will most preferably have a sample with around 150 participants. Via the survey, participants will be randomly assigned among the two groups, ensuring an equal



distribution. The presence of a control group is essential to the experimental procedure as it accounts as a basis for comparison in the study.

Both groups will be exposed to a simulated movie crowdfunding campaign, with a rewards scheme which will indicate the willingness to pay to the campaign of the participants in monetary terms. Additionally, the effect of the mediators (through perceived risk, trust etc) is analysed through a series of Likert type questions in a multi-item scale analysis (shown in the tables below). The treatment group will be presented with a tangible reward whereas the control group with an intangible one. The difference in consumer behaviour between the two groups will serve as an indicator for the effectiveness of the rewards scheme. The independent variable in this context is the type of reward offered to the participants. Conversely, the dependent variable is the participants' responses to the willingness to invest for each of the campaigns.

The results generated in this experiment can then be analysed through statistical analysis procedures to test for the statistical significance of the treatment effect. More specifically, the significant differences between the two groups with respect to willingness to pay can be investigated.

## **Thesis outline**

The outline of this paper constitutes five different chapters. The first chapter will be followed by a thorough and systematic literature review to identify the main variables that can affect the willingness to pay, and the effect different rewards systems can have on those determinants. Moreover, chapter three refers to the methodology of the research. More specifically, the research design including the sample size and sampling procedure is going to be presented followed by how variables are measured, how the data will be collected and the data analysis method. Chapter four consists of emphasizing the main results retrieved from the analysis. Firstly, the main research question and hypotheses will be analysed through descriptive statistics, tables with results from regressions and mediator analysis. The last chapter concludes the main findings, the theoretical and managerial implications, lists the limitations of the research and provides suggestions that can support further research.

## **Literature Study**

This chapter will analyse various literature studies that explain the concept of crowdfunding and the variables that affect its success. More specifically, it is going to observe different reward systems and individual determinants that can influence one's willingness to pay for a crowdfunding campaign. The focus of the research will be applied to the movie industry since success of such CF campaigns are more challenging to achieve (Baber & Fanea-Ivanovici, 2021; Huang, 2020).

### **Crowdfunding**

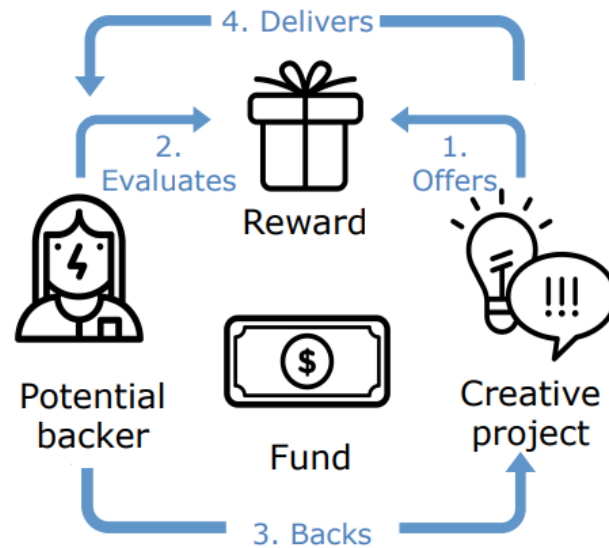
#### *Defining crowdfunding*

Crowdfunding can be defined as a method where fundraisers can gather funds for their new ventures – cultural, social, and for-profit – from many individuals that contribute to their cause by using the internet and without standard financial intermediaries (Mollick, 2014). Another simpler definition of crowdfunding is an online “open call” for financial resources for a project or idea sometimes in return of the product, service, or reward (Gerber, Hui & Kuo, 2012). There are various reasons and goals behind every fundraiser's project. One of the main reasons why entrepreneurs use crowdfunding is to try fill the funding gap that many ventures can have in their early stages (Moritz & Block, 2016). As known, the early stages of a project or a venture are quite challenging in terms of financing it and finding the right capital to start a business. Therefore, inquiring these funds from the “crowd” – individuals that are interested in the topic or project – can be an optimal financial solution to kick-start their project. Another goal of founders is also to exhibit demand for a product or project which can lead to other ways or traditional funding (Moritz & Block, 2016). Lastly, crowdfunding can also be used for marketing reasons especially in early stages to build interest for the special project or product (Moritz & Block, 2016). One of the most successful projects that took place in Kickstarter platform was the case of the “Pebble” watch, a campaign that had an aim of \$100,000 where investors would get a watch for every \$120 that they invested (Agrawal, Catalini & Goldfarb, 2014). This campaign reached the aim in two hours and brought in \$10 million dollars from 68,929 people who decided to invest (Agrawal, Catalini & Goldfarb, 2014).

There are two types of crowdfunding – direct and indirect. Direct crowdfunding refers to the direct appeal to the crowd mainly posted in websites, whereas indirect includes intermediaries in the process via a platform (Belleflamme, Omrani & Peitz, 2016). Crowdfunding activity usually can be found in crowdfunding platforms (CFPs) where fundraisers can provide a link to the campaign that they are presenting (Belleflamme, Omrani & Peitz, 2015). Some of the most used platforms for crowdfunding are GoFundMe, RocketHub, Kickstarter and IndieGoGo, which provide opportunities to pitch ideas, projects, or products to gather funds (Gerber, Hui & Kuo, 2012). There are four different types of crowdfunding campaigns that fundraisers can present in these platforms: equity based, loan based, reward based, and donation based (Zhao, Harris & Lam, 2019). The equity-based crowdfunding is when individuals invest directly or indirectly in a new venture business by buying shares or debentures; loan based CF is when “individuals lend money in return for interest payments and repayment of capital over time”; donation based CF is when consumers give money to specific charitable projects without getting anything in return; and lastly reward based CF is when individuals invest money in a project in return for a specific reward that can be a product, a reward or service (Zhao, Harris & Lam, 2019). This research will mainly focus on the influence of the different types of reward-based CF in the willingness of a consumer to pay.

### *Reward-Based Crowdfunding*

As mentioned before, two of the most recently used CF methods are reward-based and equity-based CF. In simple words, in a reward-based CF scenario, backers decide the amount of funds needed to support and invest in a certain project or product based on a list of rewards that they would get in return (Lin, Lee, & Chang, 2016). This is shown in Figure 1, illustrated in literature conducted by Lin, Lee, and Chang (2016), where the process of this transaction occurs in rewards-based CF.



**Figure 1:** Backing process on reward-based crowdfunding platforms (Lin, Lee, & Chang, 2016).

A special characteristic of this CF model is that the backers do not receive any monetary value in return but only non-monetary rewards. One of the most famous reward-based crowdfunding (RBCF) platforms, Kickstarter, has raised around \$3.9 billion for about 150,000 projects from over 15 million backers which proves the success of this type of CF model (Li & Wang, 2019). Using reward-based crowdfunding can exert information about the value of a product or a project idea by potential future investors for the entrepreneurs (Roma, Petruzzelli & Perrone, 2017). Moreover, through this interaction with rewards offered, the fund-seekers can leverage the customers as valuable resources for their potential project (Alhammad, Tan, Alsarhani & Zolkepli, 2022). According to Cappa, Franco, Ferrucci, and Maiolini (2021) two of the most important factors that characterise RBCF are the product or project itself and the reward type that is offered to consumers. Although the concept of crowdfunding has started to gain some interest amongst researchers, the selection of the types of rewards used in an offer and the amount of investment chosen has not been yet studied by literature (Simons, Weinmann, Tietz & vom Brocke, 2017).

This research will mainly focus on the type of reward as one of the characteristics that greatly influences the choice of backers to potentially invest in a project or a product. There are two main types of rewards that a fund seeker can use to attract potential customers. Wei Shi

(2018) explains in his paper that two of the most used type of rewards are *material reward* and a *symbolic reward*. A material reward can be any characteristic or feature of a product or the whole product itself (accessories can be posters or soundtracks of product) (Wei Shi, 2018). The case of Pebbles shows an example of a material reward where the entrepreneur promised a watch in return for an investment from backers. A symbolic reward is intangible and can be in different forms of communication, preferential treatment or special mentions that does not necessarily have a material value but could potentially create a relationship with the customers, giving them “a sense of elevated status” (Wei Shi, 2018). They conclude that people tend to decide to invest in projects or products that give a material reward in return rather than a symbolic reward. Wei Shi (2018) further explains that a possible reason for this is that customers tend to prefer tangible benefits, or in other words utility-based attributes, because that increases their utility faster and they get higher gratification.

### *Crowdfunding in movie sector*

Some of the main reasons why entrepreneurs decide to post their projects in crowdfunding platforms are their ability to finance their projects through channels other than traditional methods, which require certainty on future revenue and experience. These entrepreneurs avoid lengthy procedures with banks or financial agencies, and they have flexibility on deciding how to present their projects and the amount of information they want to provide (Chen, 2021). Popularity of these platforms have surged across a wide range of fields, including but not limited to tech products, sports, art, music, tourism, and movies. This research will focus mostly on the movie industry, since the funding for such investment requires higher investment compared to other fields and brings more uncertainty to backers (Agrawal, Catalini, & Goldfarb, 2014). As mentioned in the introduction of this paper, various movies have successfully generated substantial returns through crowdfunding as demonstrated by the example of Veronica Mars, the American film which raised 5.7 million USD on Kickstarter in 2014 (Baber & Fanea-Ivanovici, 2021). However, despite this success many other movies have experienced failures (Agrawal, Catalini, & Goldfarb, 2014).

Roma, Petruzzelli and Perrone (2017) analyse various determinants that influence the success of a CF project in the movie sector. They reinforce that the importance of further studying

crowdfunding in a movie sector is firstly, the popularity of CF project financing is becoming more and more popular and the main reason of them failing is the uncertainty about the quality (Roma, Petruzzelli & Perrone, 2017). In order to secure possible success in financing movies, some possible factors that should be taken into consideration according to Roma, Petruzzelli and Perrone (2017) are financial investments, providing an attractive campaign and valuable information. With the high competition that exists in the movie industry and the presence of platforms like Netflix, knowing what drives individuals to fund certain movie projects is important and then producers can finance them through crowdfunding instead of finding other financing channels (Baber & Fanea-Ivanovici, 2021). Thus, this research paper will mainly focus on the individual determinants and the reward type that influence the decision of backers to invest in CF projects in the movie industry.

## **Hypothesis 1: Crowdfunding and Perceived Risk**

### *Defining Perceived Risk*

When it comes to projects that are in their early stages, they are considered to be inherently risky and there exist a chance that the project can face failure in crowdfunding (Agrawal, Catalini, & Goldfarb, 2014). This can create feelings of uncertainty and risk in individuals' behaviour. One of the definitions that explains perceived risk is "the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision" (Cox & Rich, 1964; Kim, Bonn & Lee, 2020). Risk in its own terms can also be explained as a situation where the outcomes that we project are not all certain, but the probabilities of the alternatives can be defined (Moore, 1970). Kim, Bonn & Lee (2020) introduce the Risk Theory which states that because of the uncertainty that exists in the probabilities of outcomes or objectives stated, risk can influence an individual choice regarding financial means, social, environment, safety aspects or even strategic or project levels. Moreover, Risk Theory can also be applied in crowdfunding in terms of several elements that could cause perceived risk. Perceived risk could come from different stages of crowdfunding activity and elements such as the funding goal or project, project initiator and the intermediary stage where the financial transaction occur (Kim, Bonn & Lee, 2020). Other elements that increase perceived risk in participating in a CF activity are the operational risk, project management risk, cognitive skills, IP risks, quality risk and legal

risk (Arenas, Goh & Podar, 2015; Kim, Bonn & Lee, 2020). According to Cox & Rich (1964), perceived risk is one of the most important determinants of individuals' purchasing behaviour. Kim, Bonn & Lee (2020) further analyse perceived risk in a crowdfunding scenario as a crucial determinant of willingness to participate in crowdfunding activities. The term "risk" has been also highly associated with strategic investment decisions in general which makes risk a useful concept to study further (Moore, 1970). In his study, Demirgüneş (2015) has concluded that if individuals have conception of uncertainty over a product or project, their likeliness to pay would be smaller, thus, stating a negative relationship between *perceived risk* and *willingness to pay*. Furthermore, in a crowdfunding film project scenario, the willingness to pay of customers is negatively affected by the risk imposed in such decision (Huang, 2021). Based on these conclusions on past literature the first hypothesis that is going to be analysed is the relationship between perceived risk and willingness to pay. The first hypothesis is:

***H1a: Higher perceived risk attitude towards a CF campaign decreases the willingness to pay.***

Based on the literature mentioned previously, this research will expect a negative relationship between the perceived risk that consumers might feel towards a project in crowdfunding platforms and their willingness to pay. Until now we have analysed the general effect of perceived risk and willingness to pay but to answer the main research question, it is important to view this effect in a reward-based CF model. In the study conducted by Huang (2021), although the willingness to pay had a strong affect in the distribution of movies through crowdfunding, it was concluded that the willingness of consumers may be affected by intangible rewards projects rather than the tangible rewards. It was evaluated that one of the reasons that this effect happened was conveniences and risks on paying and investing for such projects. Gierczak, Bretschneider and Leimeister (2014) extend the study of perceived risk in one model that explains consumer's behaviour in RBCF models. The umbrella of the concept "perceived risk" is divided in nine dimensions of risk (social, psychological, post-funding, project initiator, delivery, intermediary, financial, performance risk) and it is concluded that they all have a negative effect on the willingness of consumers to fund a project (Gierczak, Bretschneider & Leimeister, 2014). In a reward-based CF system, there is always a potential drawback in terms of the success of the project if one could fund, and one element of this phenomenon is the risk that funders employ (Zhao, Harris & Lam, 2019). Based on the finding of Wei Shi (2018), it can be concluded that the

effect of the reward system offered in a CF campaign can affect the willingness of customers to participate in one and invest. Moreover, Demirgüneş (2015) stated that higher perceived risk attitude towards a CF campaign decreases the willingness to pay. Therefore, based on these findings, one could argue that perceived risk could have a mediating effect on the relationship between the type of reward campaign and willingness to pay for it.

Thus, the other two hypothesis that this research will further lie on the relationship between perceived risk and the type of reward that is offered by the entrepreneur and the mediating effect that perceived risk can have over the relationship between the type of reward on the willingness to pay. Consequently:

**H1b:** *Perceived risk is higher for tangible CF campaign rewards than intangible rewards.*

**H1c:** *The effect of a type of CF reward model on willingness to pay is mediated by perceived risk.*

## **Hypothesis 2: Crowdfunding and Trust**

### *Defining Perceived Trust*

In the previous chapter, the Theory of Risk was further discussed. In this chapter, the Theory of Trust is going to be presented and related to the topic of crowdfunding. The concept of trust can be defined as “the confidence a person has in his or her favourable expectations of what other people will do, in many cases, based on previous interactions” (Gefen, 2000; Kim, Bonn & Lee, 2020). Another definition of trust that has been provided by Salem, Elkhwesky, Baber and Radwan (2022) as “a consumer’s willingness to rely on a seller and take action in circumstances where such action makes the consumer vulnerable to the seller”. This definition takes an approach that focuses more on the transactional activity between the seller-buyer, a model that emphasizes the relationship between fund-seeker – backer. The asymmetries in information are bigger when it comes to the relation between entrepreneurs and investors thus, making perceived trust an important variable to be further discussed and researched when it comes to crowdfunding.

The importance of trust is big when analysing the behaviour of consumers in a CF scenario. The inability to control and fully understand the motivation of other individuals behind their actions makes the interaction very complex (Gefen, 2000). The fact that in crowdfunding



this the information given is through a website and with limited information, makes the complexity even larger. Thus, increasing trust is one of the best solutions to decrease this complexity and make interactions more efficient (Gefen, 2000). Cappa, Franco, Ferrucci and Maiolini (2021) emphasize that the trustworthiness on a certain project is very important for individuals' motivation to pledge to that project because they are not always successful and never reach the market. According to Baber and Fanea-Ivanovici (2021) perceived trust was referred to the "known expertise and trustworthiness of the crowdfunding platform" and other management that the entrepreneur offers in a crowdfunded project. They conclude that the perceived trust in crowdfunding positively affects the intention to participate in a crowdfunded project (Baber & Fanea-Ivanovici, 2021). Based on these two papers we can build the second hypothesis that analyses the relationship between *perceived trust* and *willingness to pay* in crowdfunding. The stated hypothesis is:

**H2a:** *Higher perceived trust towards a CF campaign positively influences the willingness to pay.*

The first hypothesis will state that as the perceived trust in customers that are interested in crowdfunding, their willingness to invest in a certain project will also increase. As mentioned before, the type of transaction is crucial in the decision of the backers. In a similar fashion like risk, trust also plays an important role when it comes to the reward-based crowdfunding. The types of rewards given in a crowdfunded project influence the choice of consumers in a RBCF project. In their paper Cavalcanti, Junqueira and Soetanto, (2022) investigate the backers' decision making in investing in RBCF in the creative industries. They provide insights on the effect of increased trustworthiness that comes from the campaign information and management in a reward – based CF model. Through their experiment they focused on the initial screening of the campaign and concluded that the material elements of the campaign here including the campaign video and the type of the reward caught the attention of the participants (Cavalcanti Junqueira & Soetanto, 2022). Moreover, information exchange in a social interaction in a reward-based CF project increase the funders' encouragement to participate in the project and further increase the trust (Zhang, Zhang & Gupta, 2022). Based on these results and to further extend the theory of perceived trust related to the type of reward offered in crowdfunding, this research will offer the following hypothesis:

**H2b:** *Perceived trust is higher for tangible reward system of a CF campaign than intangible ones.*

*H2c: The effect of a CF reward system on willingness to pay is mediated by perceived trust.*

### **Hypothesis 3 & 4: Crowdfunding, Project Attachment and Project viability**

#### *Intrinsic and Extrinsic Motivation in RBCF*

Various studies have analysed perceived risk (Baber & Fanea-Ivanovici, 2021; Huang, 2021) and perceived trust (Shin & Lee, 2020; Baber & Fanea-Ivanovici, 2021). However, little research has been done to examine an interaction of several factors that might affect and interact with funders' decision to support a reward-based crowdfunded project. Two elements that can explain the concepts of behaviour and the motivation that lies within everyone, are intrinsic and extrinsic motivation. The elements are further evaluated in a book written by Deci and Ryan (2013) on intrinsic motivation and Self-Determination Behaviour. They emphasize self-determination as a "stimuli-response" in form of a behaviour through a drive or reinforcement whereas intrinsic motivation accounts for types of behaviour that does not need reinforcement (Deci & Ryan, 2013). In other words, this theory is an extension of the cognitive evaluation theory (which takes in consideration the importance of competence and autonomy in causing intrinsic motivation) and rather explains the concept of relatedness (individuals' need to connect and relate to each other) (Allison, Davis, Short & Webb, 2015).

The motivation that individuals have within them form their behaviour and then choices, and if put in a crowdfunding scenario, offering a return from a project stimulates a backer's reward motive in crowdfunding, which causes them to invest in that project (Bretschneider, & Leimeister 2017). These concepts can take different forms when explaining behaviours or determinants that could affect the willingness of backers to participate in crowdfunding.

#### *Defining Project Attachment and Project Viability*

According to the incentive theory, which supports all the other theories of motivation, individuals' behaviour is highly motivated by an extrinsic desire for incentives which in this case is a type of reward (Bretschneider & Leimeister 2017). Herrero, Hernández-Ortega and San Martín (2020) have conducted a study on motivations of funders in RBCF and the variables of project attachment and business viability as influencers in their decision making to invest or not in a project.

Project attachment can be defined as the existence of a special relationship or bond between the customer or individual and this feeling can be applied in various sectors or areas such as goods, projects, brands, and social networks (Herrero, Hernández-Ortega & San Martín, 2020). Hung (2014) emphasizes that in accordance with the theory of self-determination that was analysed previously, the customer's need for autonomy, relatedness and competence could reinforce their emotional attachment towards a brand. In the case of crowdfunding, this bond would be created with the project that one feels most connected to invest. Moreover, this emotional attachment has been also tied with the self-concept which can lead to positive evaluation of any experience if their sense of self is affirmed (Kleine, Kleine & Kernan, 1993; Burke & Stets, 1999; Swann Jr, Polzer, Seyle & Ko, 2004; Hung, 2014). Project attachment is an intrinsic motivation, such as interest, engagement, curiosity and enjoyment, and is said to positively influence the intention to fund a certain project posted in a crowdfunding platform (Herrero, Hernández-Ortega & San Martín, 2020). Hence this research will further explore this relationship between project attachment and the intention to invest in a project, more specifically the willingness to pay for it. The next hypothesis states:

***H3a: The higher the project attachment towards a CF campaign, the higher the willingness to pay.***

Another variable that Herrero, Hernández-Ortega and San Martín (2020) further analyse is business viability. They define business or project viability as a process where it starts with identification of a business opportunity, evaluation and screening and opportunity to create a venture (Herrero, Hernández-Ortega & San Martín, 2020). Cho and Kim (2017) emphasize the fact that in crowdfunding platforms, one of the most important influencers in a project's success is the projects' viability as customers want to see positive results in general. Thus, Herrero, Hernández-Ortega and San Martín (2020) have stated in their study that if customers have a perception that a certain crowdfunded project has a high viability, they are more likely to have high intentions to fund it. Thus, our next hypothesis is going to focus on the willingness to pay instead of the intentions to fund. The hypothesis state:

***H4a: The higher the project viability towards a CF campaign, the higher the willingness to pay.***

While tangible rewards indicate good performance, they often decrease intrinsic motivation, which is more closely tied to personal factors like self-determination, self-realization, and interest (Kim, Bonn & Lee, 2020). Because we defined project attachment as an

intrinsic factor it can be argued that if the reward type of the movie project offered is tangible the project attachment towards the movie project would decrease in a RBCF model. In the contrary intangible rewards tend to increase the extrinsic motivation which in this case is defined as the project viability. Thus, we can define the next two hypothesis that state:

**H3b:** *Having high project attachment decreases when the reward system of a CF campaign is tangible compared to intangible.*

**H4b:** *Having high project viability increases when the reward system of a CF campaign is tangible compared to intangible.*

Furthermore, Kim, Bonn & Lee (2020) has studied the relation between attachment and behavioural intentions, and they conclude that brand attachment directly mediates intrinsic extrinsic values of a product or project with behavioural intentions. There have been studies conducted using project attachment and viability as mediators of motivation and intention behaviour, however, there are not many studies done where these two variables mediate the relation of the type of reward system with willingness to invest. As mentioned before, the type of reward plays an important role as both intrinsic and extrinsic motivator towards the individuals' behaviour and intentions. Thus, the last hypothesis that this research will further analyse is the mediating effect that project attachment can have toward the relation between the type of reward and the willingness to pay for a crowdfunded movie project. Consequently:

**H3c:** *The effect of a CF reward system on willingness to pay is mediated by project attachment.*

**H4c:** *The effect of a CF reward system on willingness to pay is mediated by project viability.*

### **Conclusion of literature study**

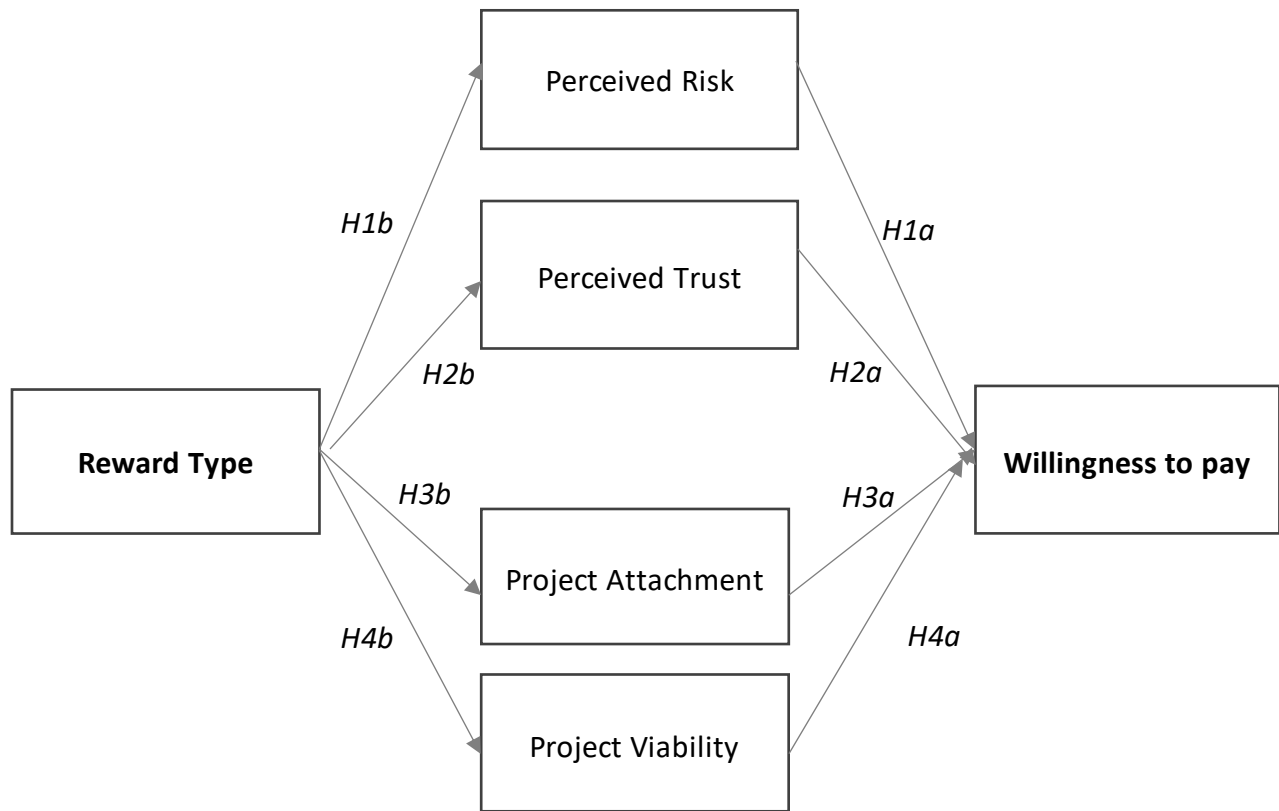
As mentioned, there are several determinants that can mediate the choice of customers funding a certain project in a crowdfunding project. These determinants were discussed in the previous chapters of this research based on several literature studies. Some of the main literature that this research was based is presented in Appendix H.

The papers of Shin & Lee (2020), Huang (2020) and Baber & Fanea-Ivanovici (2021), are used to gain more insight on the effect that perceived risk and perceived trust has on the intention to invest in a CF project. Huang (2020) explores this effect in the movie industry, where the project is a campaign of a film that usually are posted in crowdfunded platforms. Since this

research is going to focus on movie industry a lot, this paper serves great insights on how these campaigns are evaluated. The study of Wei Shi (2018) provided an explanation on the different types of reward systems which are materialistic (tangible) and non-materialistic (non-tangible). This research will use these types of reward type to further analyse their effect in the willingness of customers to fund a crowdfunded project. Lastly the paper of Herrero, Hernández-Ortega, & San Martín (2020) was used to further build our model by adding two additional mediators which are project attachment and project viability. In conclusion, this papers in addition to others were used to build a model with the relationship between the type of reward in crowdfunding and the willingness to pay and mediating factors of perceived risk, perceived trust, project attachment and project viability.

## Theoretical Framework

After having constructed the various hypotheses that would give an answer to the main research question, a theoretical framework will serve to build the basis of this research. This framework is illustrated in Figure 2 below:



**Figure 2:** Conceptual Framework

## **Methodology**

### **Research design and structure**

The main purpose of this chapter is to introduce and explain the research design that will be used to answer the main question on how CF reward types and individual behaviour determinant affect the willingness to pay for a CF campaign. The design used for this paper is an experimental design. Some of the benefits that experiments have are that they allow researchers to assess the effect of variables on certain outcomes while controlling for other variables, helps contracting realism and can efficiently measure actual behaviours in marketing and consumer preference, it can be combined with other methods to provide scientific rigor (Viglia, Zaefarian & Ulqinaku, 2021). Since marketing is mostly concerned with customer behaviour analysis, an experiment would be the most efficient method to answer the main research question of this paper. The main aim of this research is to find the effect of reward types have on the willingness of backers to pay for a crowdfunding campaign which in its sense represent a type of behaviour that backers have towards crowdfunding in general.

The online experimental design plan consists in a survey conducted in Qualtrics. Participants that will answer the questionnaire are divided into 2 groups: the treatment and control group. The participants that will receive the treatment group will be shown a campaign for a movie project that provides tangible rewards such as a prop from a movie or tickets to a garden party organized with the crew of the project. On the other hand, the control group will have to answer the same campaign, but the reward type will be intangible, and will offer a mention of the backer's name in the credits and shout out in social media.

The design is a between-subjects design as the participants will be assigned randomly between two groups, treatment, and control. In a between-subject design each participant is exposed to only one treatment in a random manner and then casual estimates are retrieved by comparing one experimental condition to those in the other (Charness, Gneezy & Kuhn, 2012). In this case the behaviour of participants for tangible and intangible rewards will be compared. One main drawback of the within-subject design is that it has an effect of overlearning on participants as they view both treatments and can manipulate their true choice and belief, whereas in a between-subject they know little about two treatments being analysed (Carroll & Nelson, 1993).

## **Procedure of data collection**

As mentioned, the experiment was created through a survey conducted in Qualtrics. The link of this survey is distributed online to groups of students, friends, family, and online survey websites. When participants receive the link, they are introduced to the reason why this experiment is taking place and information about the risks, participation rules, confidentiality if they participate further with the survey. They are also asked about their consent to the rules presented. If they answer “Yes” then their answer will be recorded and taken into consideration for data analysis. After they give their consent, participants are given a short introduction of what crowdfunding is, how does it work and the types of reward that project makers can offer. This will allow people in general to learn a bit more about the topic of the research even if they do not have sufficient knowledge about crowdfunding in general. Next step is the questions where they are introduced with the movie project campaign of a movie posed in Indiegogo, a platform where most movie projects are posted for investment. In this campaign, a description of the movie “Redcoat” is presented followed by the tab that offers people to make contributions. The main highlight of the campaign is the type of reward that is being offered. One question uses the campaign with tangible reward (tickets for a garden party with the staff, prop for a movie) and the other offers the same campaign but with an intangible reward (shoutout in social media and special thanks in credits). Both questions will have a time frame where participants cannot see the “next button” so the readers can have time to look at the details of the campaign before they answer the following questions. This nudges people to take a closer look at details and make sure they are invested in the survey and avoids people skipping the most important part of the survey. These two questions are randomized in an evenly way so each respondent will be randomly selected for one of the two campaigns. This choice was made to avoid bias and make the results more effective. Moreover, a manipulation check is added after the campaign question as an open question to the respondents that asks what type of reward was offered in each other campaigns to see if they paid attention to what was displayed in the campaign.

The following question asks respondents about the willingness of them to invest in each of the campaigns. The following questions presents statements about the mediators of the model that might affect the relation between CF reward types and willingness to participate in this project. The measures of the variables perceived risk, trust and project viability and attachment



are in Likert scale (strongly disagree-strongly agree) but a more extensive information about the measure will be presented in the next chapter. All these questions have a timer option added to make sure that respondent take time to read each statement provided. If an answer takes less time than the limit, that data point will be excluded from the data set. Moreover, an attention check question will be inserted after the question of perceived trust to see if respondents are truthfully answering each question and not selecting randomly. Lastly, there are control variables that allow getting information about their age, gender, place of residence, employment status. All questions besides the two campaign ones are offered to all participants despite the treatment or control group. After the data is collected, it will then be polished and used next for data analysis.

### **Variable Measurement**

The main question of this research intends to discover the effect that CF reward types have on the willingness of consumers to pay for a movie project. In the context of crowdfunding campaigns, a number of mediating variables are going to be used as predictors of individual behaviour. Perceived risk, perceived trust, project attachment and project viability are expected to mediate the relationship between the independent and dependent variable which are reward types and willingness to pay. Each of these variables will be measured in the experiment in forms of scale and further analysed accordingly.

#### *Dependent and independent variables*

The independent variable of this research is the reward type offered in each CF campaign which is tangible and intangible. To measure this variable realistic CF campaign scenarios will be created to operationalize the two different reward types (tangible and intangible). The scenarios will be carefully evaluated by respondents and then they will be asked to rate their willingness to invest in this project which is also the dependent variable. The dependent variable will be measure by a matrix question where respondents are asked about their willingness to invest in this campaign with a Likert scale from “very unwilling” to “very willing”.

### Perceived risk

The first mediating variable is perceived risk. This variable was used in a study of Baber & Fanea-Ivanovici, (2021), where they use the exact variable to find the effect on participation intents to crowdfunding activity. They represent its meaning and different forms to understand the concept in several items that are displayed in Table 2. For each of the items used, a 5 Likert scale is going to be used to measure each statement starting from “Strongly Disagree” to “Strongly Agree”.

**Table 2:** The items representing perceived risk, its scale, and the source of reference

Variable	Survey Items	Measurement	Source of reference
<b>Perceived risk (PR)</b>	If I invest in the film and web series crowdfunding platform, I may suffer a monetary loss due to fraud.	5-point Likert scale 0-strongly disagree; 5-strongly agree	<i>Baber &amp; Fanea-Ivanovici, (2021)</i>
	I would be concerned about whether the film and web series crowdfunding platform appropriately manage funders' private information.	5-point Likert scale 0-strongly disagree; 5-strongly agree	
	If I support a project from the film and web series crowdfunding platform, I would be concerned about whether the project is successful.	5-point Likert scale 0-strongly disagree; 5-strongly agree	
	I would be concerned if the crowd fundraiser did not respect deadlines throughout the campaign and then during project implementation.	5-point Likert scale 0-strongly disagree; 5-strongly agree	

### Perceived trust

Another mediator used in this research to study the relation between reward types and willingness to pay for a crowdfunded project is perceived trust. The items that represent this variable are used in a study conducted by Salem, Elkhwesky, Baber and Radwan (2022) that mostly relate to the trustworthiness that investors have towards these platforms, financial transactions involved and the promises they make. These items are presented in Table 3 below.

The measurement used for this mediator are in a 5-point Likert scale where 0 is “strongly disagree” and 5 is “strongly agree”.

**Table 3:** The items representing perceived trust, its scale, and the source of reference

Variable	Survey Items	Measurement	Source of reference
<b>Perceived Trust (PT)</b>	I trust the information on crowdfunding platforms.	5-point Likert scale 0-strongly disagree; 5-strongly agree	
	I believe that crowdfunding platforms are trustworthy for financial transactions.	5-point Likert scale 0-strongly disagree; 5-strongly agree	<i>Salem, Elkhwesky, Baber &amp; Radwan, (2022)</i>
	I believe crowdfunding platforms keep their promises	5-point Likert scale 0-strongly disagree; 5-strongly agree	

#### *Project attachment*

The next mediator that is being used in this research model is project attachment. Herrero, Hernández-Ortega, and San Martín (2020) provide an experiment to analyse the effect of project attachment on funding intentions. They provide items for the concept of attachment and explain it in terms of importance, motivation and feeling (Herrero, Hernández-Ortega & San Martín, 2020). The measurement for this variable is 5-point Likert scale where 0 is “strongly disagree” and 5 is “strongly agree”.

**Table 4:** The items representing project attachment, its scale, and the source of reference

Variable	Survey Items	Measurement	Source of reference
<b>Project attachment</b>	Offering my help to this project would seem important to me.	5-point Likert scale 0-strongly disagree; 5-strongly agree	
	Offering my help to this project would motivate me a lot.	5-point Likert scale 0-strongly disagree; 5-strongly agree	<i>Herrero, Hernández-Ortega &amp; San Martín (2020)</i>

Offering my help to this project would make me feel good.	5-point Likert scale 0-strongly disagree; 5-strongly agree
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### *Project viability*

Lastly, the mediator project viability is also used in the model to further analyse the relationship between the dependant and independent variable. The source of reference for this variable is the study of Herrero, Hernández-Ortega, and San Martín (2020) where they represent viability in terms of how likely respondents are to believe that the project will reach its goals, objectives, its profitability. This variable is measured in 5-point Likert scale where 0 is “strongly disagree” and 5 is “strongly agree”.

**Table 4:** The items representing project viability, its scale, and the source of reference

<b>Variable</b>	<b>Survey Items</b>	<b>Measurement</b>	<b>Source of reference</b>
	I would say the probability of this project reaching its objectives is very high.	5-point Likert scale 0-strongly disagree; 5-strongly agree	
	I would say the probability of this project being profitable is very high.	5-point Likert scale 0-strongly disagree; 5-strongly agree	
<b>Project viability</b>	I would say the probability that this project will obtain good results is very high.	5-point Likert scale 0-strongly disagree; 5-strongly agree	<i>Herrero, Hernández-Ortega &amp; San Martín (2020)</i>

### *Control variables*

Lastly, in the end of the questionnaire, respondents would have to answer questions about their background and demographics, more specifically experience, age, gender, residence, and employment. One of the questions asks if the respondents have had previous experience in using or investing in a crowdfunding project before. Moreover, the next question asks about their age groups and one in gender in a multiple question type. Next, a question about where each participant resides is displayed in a roll down kind of question. And lastly, the employment status question is given. These control variables are going to be analysed in the end of the chapter to

further analyse the effect that could influence the participants' willingness to pay for a CF campaign.

### **Sampling method**

The population size of the people that invest in crowdfunding, or even of people that would be willing to invest in the future in crowdfunding platform is very large. Nonprobability sampling techniques are mostly useful in cases like this, when the population is quite big and randomization would be very difficult (Etikan, Musa & Alkassim, 2016). Convenience sampling is a nonprobability method where "members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study" (Etikan, Musa & Alkassim, 2016). Similarly, because of several time constraint and difficulty of reaching the right crowd like finding people that usually invest in movie projects, convenience sampling would be the most efficient way to choose the sample size. Some of the benefits of this way is that it is not costly or time consuming and offers a simpler procedure of sampling (Stratton, 2021).

Moreover, Burmeister and Aitken (2012) explain in their study different ways to determine the sample size based on the number of predictors used in the model and the number of items used for each. The formula to be used is  $N \geq 50 + 8p$  where  $p$  is the number of predictors. Since the four mediators used in the model each have 4, 3, 3, and 3 items respectively, the sum of the items used is 13. Thus, if we apply this in the formula, the sample size ( $N$ ) would need to be more than 150. Based on the previous argument, because of geographical and time constraints, 150 would indeed be the most efficient number for respondents that will participate in the survey.

### **Data analysis**

The main method to analyze the data and test the hypothesis of this research is the statistical software SPSS when it comes to the relation between dependent and independent variables. As the dependent variable is continuous and the independent variable is binary, the method used in the research is ANOVA for the relationships that involve reward type and regression for the other ones. Furthermore, because there is also a mediation effect,

bootstrapping is going to be used to analyze the effect of each mediator between the relationship of dependent and independent variable. Furthermore, to make sure that there is reliability in the experiment, the Cronbach's alfa is going to be calculated for each scale that was used in the survey.

## **Data Analysis and Results**

This chapter will present the main results that were generated through the analysis of data gathered through Qualtrics. It will briefly explain how the data was cleaned and how it was used to understand and test the hypotheses that were stated in this research. Firstly, descriptive statistics are used to evaluate the respondents' background and analyse the control variables. Then, factor analysis and reliability tests are used to validate all items used for the variables. Lastly, regressions are used to test the hypothesis and generate the final results.

### **Descriptive statistics**

#### *Data preparation*

The Qualtrics survey was active for 15 days to reach the desired sample for this research. In total, there were 172 answered gathered, but only 149 of them were valid. From the 23 responses that were eliminated from the data set, 9 of them failed to answer the attention check which asked, "what type of reward was offered in the campaign that was presented to you". Failing to answer this question properly means that the respondents did not pay any attention to the campaign details. Others also failed to answer the second attention check. The other 14 respondents did not continue the questionnaire but instead stopped at different questions failing to complete it 100%. In the introduction part of the survey, it was stated that, people who fail to complete the whole questionnaire would be eliminated. After clearing the data, 149 respondents correctly filled in the survey.

#### *Control variables and background of participants*

This part of the research will analyse the distribution of the data set and measures the central tendency and variability of it. The data set was divided into two main groups: the treatment and the control group. The final data consisted in a very equal division in each group.

Looking at Table 5, 49.7% of the respondents were placed in the treatment groups where they were shown the campaign with the tangible reward and 50.3% of the respondents were placed in the control group where they were shown a campaign with an intangible reward.

**Table 5:** The distribution of the respondents in two groups

Campaign	N	Percentage
Treatment (1)	74	49.7%
Control (0)	75	50.3%

The first question that was asked in the group of the control variables was the experience of the respondents with crowdfunding platforms and investment activity. From the results gathered, the majority of the participants did not have an experience with investing in such platforms and projects. Table 6 shows that 73.8% said “No” and 26% of participants answered “Yes”.

**Table 6:** The distribution of the experience variable in number and percentage

Experience	N	Percentage
Yes	39	26.2%
No	110	73.8%

From the data gathered, 38.3% of the respondents were male and 33.5% were female and the rest is divided within the other options respectively, 17.4% being non-binary and 10.1% that preferred not stating their gender. These results can be shown in Table 7 below.

**Table 7:** The distribution of the gender within the data shown in percentage and number

Gender	Male	Female	Non-binary	Prefer not to say
Percentage	38.3%	33.5%	17.4%	10.1%
N	57	50	26	15

The next control variable that was included in the survey was the age of the respondents which was divided in five groups. According to the results in Table 8, the majority of respondents

were on the age 18-24 years old, 34% were 25-35 years old, 17% was 36-49 years old and 10% belonged in the age group 50-64 years old. Only 1 person was 65+ and retired.

**Table 8:** Distribution of the age groups shown in number and percentage

Age	18-24 years old	25-35 years old	36-49 years old	50-64 years old	65+ years old
<b>N</b>	57	50	26	15	1
<b>Percentage</b>	38%	34%	17%	10%	0.07%

The residency of the participants was also required in the survey published. The respondents were distributed in 15 different countries that are listed in the table below with Netherlands having the highest percentage (48%) followed by Albania (13%), Germany (9%) and France (8%). This is mostly the case because the survey was shared with friends, family and in social networks.

**Table 9:** Distribution of countries of residency shown in number and percentage

Countries of Residency	N	Percentage
Albania	19	13%
Austria	6	4%
Belgium	8	5%
Chile	2	1%
Colombia	2	1%
France	12	8%
Germany	14	9%
India	1	0.6%
Italy	2	1%
Japan	1	0.6%
Netherlands	71	48%
South Africa	3	2%
Switzerland	2	1%
Ukraine	1	0.6%
USA	5	3%



Lastly, the last control variable that was used is the employment status that most respondents had. The majority of participants were fully employed or employed part time and others were unemployed looking for work. The results can be seen in Table 10.

**Table 10:** Distribution of the employment status shown in number and percentage

<b>Employment status</b>	<b>N</b>	<b>Percentage</b>
Employed full-time	87	58%
Employed part-time	21	14%
Unemployed looking for work	17	11%
Unemployed not looking for work	12	8%
Retired	1	0.6%
Self-employed	4	3%
Prefer not to say	7	5%

#### *Central tendency and variability of data*

In order to measure the central tendency and variability of the data measures such as mean and standard deviation are analysed. In Table 11, the means and standard deviation of the main control variables are shown. It can be seen that the standard deviations of the variables are close to zero which means that they are mostly clustered around the mean.

**Table 11:** Mean and standard deviation of the control variables

<b>Variable</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Experience</b>	1	2	1.74	.441
<b>Age</b>	1	5	2.01	1.013
<b>Gender</b>	1	4	1.62	.609

Moreover, other variables such as the items of the mediator should also be considered when analysing the descriptive statistics. All four mediators which are perceived risk, perceived trust, project attachment and project viability lie between 1-5, 1 representing “*strongly disagree*” and 5 “*strongly agree*”. Again, the standard deviation of these variables is about 1 on average which means that they also close to the mean in terms of distribution.

**Table 12:** Mean and standard deviation of the items of mediators

Variable	Minimum	Maximum	Mean	Std. Deviation
PR1	1	5	3,13	1,024
PR2	1	5	2,96	1,071
PR3	1	5	3,67	1,068
PR4	1	5	3,18	1,127
PT1	1	5	3,42	,967
PT2	1	5	3,28	1,039
PT3	1	5	3,36	,870
PA1	1	5	3,42	1,054
PA2	1	5	3,13	1,095
PA3	1	5	3,66	,963
PV1	1	5	3,25	1,058
PV2	1	5	2,84	,959
PV3	1	5	3,13	,968

### Factor Analysis

Exploratory Factor Analysis (EFA) is a process that validates items that belong to a questionnaire which have not been validated (Samuels, 2017). One of the forms of the EFA is Factor analysis which allows to analyse the relationship between each of the items and common variance shared between each item (Samuels, 2017). This type of analysis will be used to also to validate the items of the mediators used in the questionnaire. The factor analysis is done in SPSS. As a first step before analysing the factor extraction of the items, it is important to analyse the values of the bivariate correlation matrix of all items to see if there are any high values that could show signs of multicollinearity. These results are shown in the Appendix B. The determinant is 0.003 and it is higher than 0.001 which means that the items are not totally unrelated. None of the variables exceeds the correlation 0.8 which means that there is not multicollinearity. Moreover, there are other steps involved on how to extract the factors. The method used to analyse the items is Principal Axis Factoring. Another factor that needs to be considered is also the type of rotation that is going to be used in the analysis. An orthogonal rotation such as varimax it forces the factors to be independent of each other whereas an oblique rotation

imposes that there is some correlation between the factors to improve the intercorrelation between items (Samuels, 2017). To decide which one to use, firstly it is important to see the correlation value through the component correlation matrix. If the absolute value of any of the values of the component is lower than 0.32 then the rotation should be changed into varimax. After running a factor analysis with oblique rotation and seeing the results which are shown in Appendix C, all the values are below 0.32 which means that the chosen rotation for this study will be varimax. Moreover, to extract the number of factors the Eigenvalue should be less than 1. To determine the number of factors that should be retained, the item loading should be analysed. Anything that is lower than 0.3 should be retained (Samuels, 2017).

After applying all the rules and running the analysis in SPSS, the results of the factor loadings are shown in the Appendix D. The coefficients of the first two items P1 and P2 are less than 0.3, respectively 0.135 and 0.190. The other values marked in green show that the values are strong and can be used in the analysis. After removing these two items, the factor analysis is rerun in SPSS.

Before diving in the factor loadings, the KMO and Bartlett's Test is important to be considered. The most accepted value for the Kaiser-Meyer-Olkin Measure of Sampling Adequacy, which measures the adequacy of the sample used, is 0.5 and anything above 0.6 is usually preferred which is also the case with a value of 0.752. Looking at Table 13, the Bartlett's Test of Sphericity is statistically significant with a value below 0.001 which is positive.

**Table 13:** KMO and Bartlett's Test

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		.752
	<i>Approx. Chi-Square</i>	745.749
<b>Bartlett's Test of Sphericity</b>	<i>df</i>	55
	<i>Sig.</i>	<.001

Furthermore, there were four factors that were extracted by SPSS. In Appendix E, Figure 1, and Figure 2 the scar plot, there are 4 factors with Eigenvalue less than 1 and that these factors explain 70.8% of the variance. In addition, Table 14 shows the item loading for each

component extracted by SPSS. As we can see now all items have coefficients higher than 0.3 (the values in green).

**Table 14:** Rotated Component Matrix

	Component			
	1	2	3	4
<b>PR3</b>	-0.075	-0.067	-0.091	.865
<b>PR4</b>	-0.031	-0.167	-0.054	.837
<b>PT1</b>	.097	.853	.183	-.045
<b>PT2</b>	.225	.868	.050	-.041
<b>PT3</b>	-.084	.766	.202	-.268
<b>PA1</b>	.831	.109	.255	.006
<b>PA2</b>	.888	.048	.211	-.095
<b>PA3</b>	.821	.075	.045	-.047
<b>PV1</b>	.228	.288	.805	-.054
<b>PV2</b>	.050	.012	.894	-.194
<b>PV3</b>	.383	.245	.761	.061

*Notes: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.*

### Reliability analysis

Cronbach's alpha measures internal consistency between items in a scale. It views how consistent your responses are throughout the survey. If there are usually less than 10 items involved in the analysis, the results should be bigger than 0.5. Looking at the results in the Table 15, all values for each variable are larger than 0.5 which means that there is a high reliability in the sample and responses given.

**Table 15:** Cronbach's Alfa for each variable

	Cronbach's Alfa	N of Items
<b>Perceived risk (PR)</b>	0.680	2
<b>Perceived Trust (PT)</b>	0.817	3
<b>Project Attachment (PA)</b>	0.846	3

<b>Project Viability (PV)</b>	0.845	3
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## Results

This chapter will focus on the analysis of each hypothesis that was stated in this research. By finding these, four models for the mediators are going to be used in order to find the effects. Before starting the analysis, new variables were constructed for the mediators in this model by taking the sum of all items and dividing by the number of the items that each contain. To analyse the effect between the independent variable with the dependent variables and mediators, one way ANOVA analysis was used to compare the means between the control and treatment group. ANOVA is used as the reward type is a categorical variable. Then, the variables are used to run the mediation analysis by using the traditional Barron and Kenny process. In their research, Baron and Kenny (1986) emphasize the importance of the mediator in an analysis, stating that they can explain the external effects take on the internal psychological significance. To understand if there is mediation effect in a model there are three types of effects to consider. The first effect is the *direct effect* which is the direct relationship between the independent variable and a dependent variable in presence of a mediator. The second one is the *indirect effect* which explains the relationship that flows from an independent variable to a mediator and the to the depend variable. Ans lastly, the *total effect* is the combined influence of the direct effect between two variables and the indirect effect that comes from the mediator. All results of the regressions and mediation analysis are run in SPSS.

*Reward type, Perceived risk, and Willingness to pay.*

The first hypothesis that we stated in the previous chapters consisted of the relationship between reward type and willingness to pay which is mediated by perceived risk. Based on different literature the first hypothesis stated was:

**H1a:** *Higher perceived risk attitude towards a CF campaign decreases the willingness to pay.*

To test this hypothesis, a linear regression was run in SPSS where the dependent variable is willingness to pay, and the independent variable is perceived risk. These results are also retrieved from PROCESS from the mediation analysis. The results can be shown in Table 16:

**Table 16:** Linear regression between the dependent variable WTP and perceived risk

Model 1	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	0,500	0,644			0,776	0,439
PR	-0,026	0,096	-0,020		-0,270	0,787

Notes: Dependent Variable: WTP

The coefficient of perceived risk is negative -0.026 which means that respondent's willingness to pay for a crowdfunding project decrease with 0.026 points if the perceived risk increases. According to the results, the relationship between perceived risk and willingness to pay is statistically insignificant with a p-value more than 0.05, respectively 0.787. This means that we the hypothesis cannot be accepted.

The next hypothesis that was stated in the literature study was regarding the relationship between perceived risk and the reward type. The hypothesis stated:

**H1b:** *Perceived risk is higher for tangible CF campaign rewards than intangible rewards.*

To test this hypothesis, an ANOVA analysis was conducted to analyse their relationship. The results of this analysis are shown in Table 17:

**Table 17:** Descriptive analysis of the variable perceived risk between 2 different groups

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum							
					Lower Bound	Upper Bound									
					<b>Control</b>	74			3.3986	.99306	.11544	3.1686	3.6287	1.00	5.00
					<b>Treatment</b>	75			3.4533	.92332	.10662	3.2409	3.6658	1.50	5.00
<b>Total</b>	149	3.4262	.95574	.07830	3.2715	3.5809	1.00	5.00							

**Table 18:** ANOVA analysis of reward type on perceived risk

	PR				
	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	.111	1	.111	.121	.728
<b>Within Groups</b>	135.077	147	.919		

<b>Total</b>	135.188	148
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From Table 17, there is almost a similar mean in terms of how they perceive risk in a control (intangible reward) vs treatment effect (tangible reward) around 3.399 and 3.453. The Levene's test which tests the homogeneity of the variance in this case is also not significant, which shows that there is homogeneity in the sample. Table 18 shows the results from the ANOVA analysis. The significance value is 0.728 which is statistically insignificant value, p value is more than 0.005. This means that there is not a statistically significant difference between the means of the two groups. Thus, we could argue that hypothesis H1b cannot be accepted.

To finish the mediation analysis the last two analysis are conducted. The first one views the relationship between the type of reward and the willingness to pay. Then, the total effect of the first mediator is analysed using bootstrapping. The next hypothesis states:

**H1c:** *The effect of a type of CF reward model on willingness to pay is mediated by perceived risk.*

Before analysing the mediation effect, it is important to analyse if there is statistical difference in the willingness to pay between two groups that are shown different reward types.

**Table 19:** Descriptive analysis of the variable willingness to pay between 2 different groups

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					WTP			
<b>Control</b>	74	2.82	.998	.116	2.59	3.06	1	4
<b>Treatment</b>	75	4.09	1.187	.137	3.82	4.37	1	5
<b>Total</b>	149	3.46	1.266	.104	3.26	3.67	1	5

**Table 20:** ANOVA analysis of reward type on willingness to pay

	WTP				
	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	59.984	1	59.984	49.800	<.001
<b>Within Groups</b>	177.063	147	1.205		
<b>Total</b>	237.047	148			

The means of two groups in this case are slightly different from each other. The WTP of the people who were assigned in the control group is 2.82 whereas that of treatment is 4.09. Thus, there is a higher willingness to pay for a tangible reward than a non-tangible one. According to Table 20, there is a statistically significant difference between the two means of the groups since the p-value is less than 0.05. Moreover, the Welch and Brown-Forsythe test (Appendix F, Figure 2) is also significant, which supports the ANOVA results. Thus, we could conclude that the willingness to pay is higher for the treatment group compared to the control one.

**Table 21:** Total, direct, indirect effect on the first mediation analysis of perceived risk

<i>Total effect of X on Y</i>					
Effect	SE	t	p	LLCI	ULCI
1,2690	0,1798	7,0569	0.0000	0.9136	1,6244
<i>Direct effect of X on Y</i>					
Effect	SE	t	p	LLCI	ULCI
1,2828	0,761	7,2843	0.0000	0,9347	1,6308
<i>Indirect effect of X on Y</i>					
PR	Effect	BootSE	BootLLCI	BootULCI	
	-0,0138	0,0436	-0,1137	0,054	

Table 21 is a summary of the mediation analysis of perceived risk. Looking at the results of the indirect effect, the bootstrap interval includes 0 in the interval. This shows that there is no mediation effect of reward type and willingness to pay by perceived risk. Thus, it can be stated that the third hypothesis can be rejected.

*Reward type, Perceived Trust and Willingness to Pay.*

The next hypothesis stated on the research are related the mediation model between reward type, perceived trust, and willingness to pay. To analyse if there is a mediation effect, first it is important to analyse the relationship between reward type vs perceived trust, and perceived trust vs willingness to pay. The first hypothesis tested is:

**H2a:** Higher perceived trust towards a CF campaign positively influences the willingness to pay.



**Table 22:** Regression of perceived trust vs willingness to pay

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0,500	0,644		0,776	0,439
PT	0,588	0,119	0,383	4,957	<,001

Notes: Dependent Variable: WTP

The results in Table 22 show a positive relationship between perceived trust and willingness to pay. The results are also statistically significant as the p-value is less than 0.05. This means that the hypothesis can be accepted, higher perceived trust towards a crowd-funded campaign increases the willingness of participants to pay.

Next, the relationship between the reward type and perceived trust is analysed as stated in the second hypothesis:

**H2b:** Perceived trust is higher for tangible reward system of a CF campaign than intangible ones.

The results are shown in Table 23:

**Table 23:** Descriptive analysis of the variable perceived trust between 2 different groups

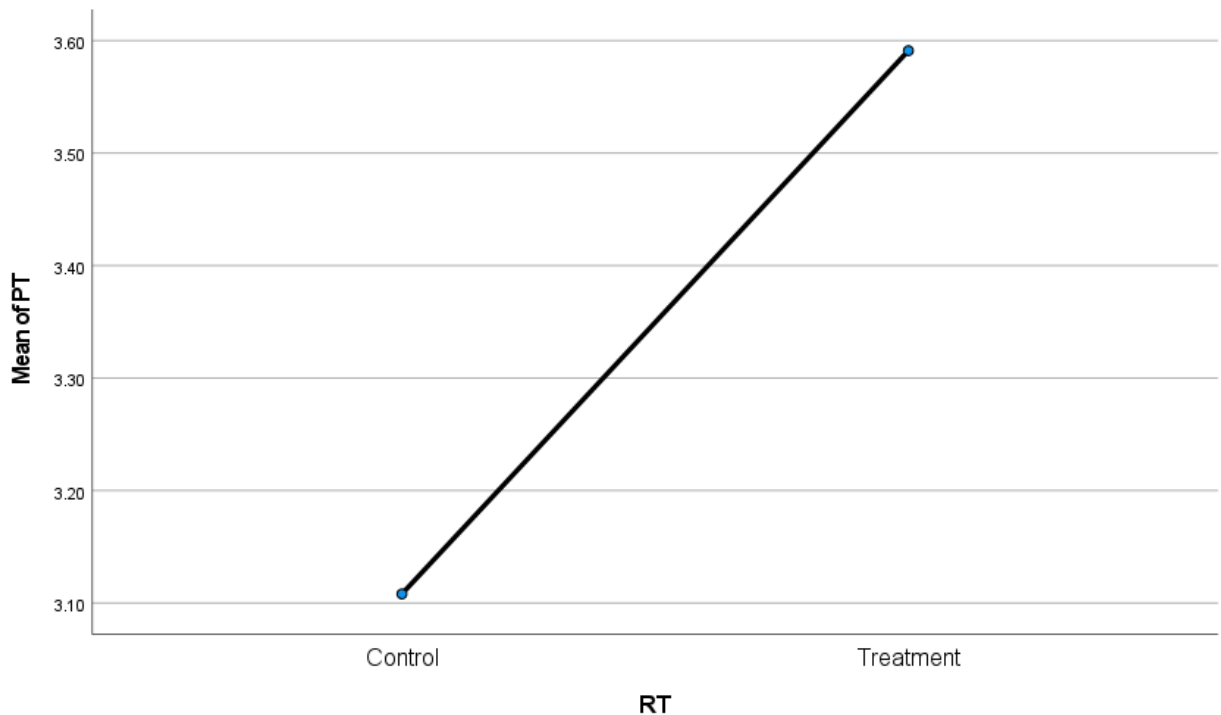
	PT							
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Control	74		
Treatment	75	3.5911	.85173	.09835	3.3951	3.7871	1.00	5.00
Total	149	3.3512	.82271	.06740	3.2180	3.4844	1.00	5.00

**Table 24:** ANOVA analysis of reward type on perceived trust

	PT				
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.690	1	8.690	13.963	<.001
Within Groups	91.485	147	.622		
Total	100.174	148			

Perceived trust is slightly different between the two groups according to the descriptive table above. In accordance with the results of ANOVA as well, there is statistically significant difference between the control and treatment group. Thus, it can be concluded that hypothesis H2b can be accepted as the perceived trust is higher when tangible asset is shown compared to a non-tangible one. This can also be supported by the Welch and Brown-Forsythe test (Appendix F, Figure 3) which is also statistically significant.

Moreover, the line plot can visualise this effect of the difference of means in the control and treatment group. The mean value of perceived trust in the control group is significantly lower than in the treatment group with 0.5-point difference.



**Figure 2:** Line plot for the mean difference of perceived trust in the control and treatment group.

Lastly, the mediation analysis of perceived trust is conducted. The final hypothesis states that:  
**H2c:** *The effect of a CF reward system on willingness to pay is mediated by perceived trust.*

**Table 25:** Total, direct, indirect effect of mediation analysis of perceived trust

<i>Total effect of X on Y</i>					
Effect	SE	t	p	LLCI	ULCI
1,2690	0,1798	7,0569	0.0000	0.9136	1,6244
<i>Direct effect of X on Y</i>					
Effect	SE	t	p	LLCI	ULCI
0,9895	0,1717	5,7628	0.0000	0,6502	1,3289
<i>Indirect effect of X on Y</i>					
PT	Effect	BootSE	BootLLCI	BootULCI	
	0,2795	0,1011	0,1074	0,5018	

Table 25 shows significant results of the total and direct effect of the independent variable on the dependent one. The bootstrap confidence interval does not include 0 as a mean thus, it can be argued that there is a mediation effect. This means that perceived trust does mediate the relationship between reward type and participants' willingness to pay.

*Reward type, Project Attachment and Willingness to Pay.*

This section will display the results from the third mediation analysis of *project attachment* towards the relation of *reward type* and *willingness to pay*. In order to investigate this result, firstly the regressions between reward type vs project attachment, and project attachment and willingness to pay is analysed. The first hypothesis was stated below:

**H3a:** *The higher the project attachment towards a CF campaign, the higher the willingness to pay.*

To test this hypothesis, a regression between project attachment and willingness to pay is run in SPSS. The results are shown in Table 26:

**Table 26:** Regression of project attachment vs willingness to pay

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	0,500	0,644		0,776	0,439
PA	-0,074	0,108	-0,053	-0,686	0,494

Notes: Dependent Variable: WTP

The results show that the higher the project attachment that a participant has on a CF campaign the lower their willingness to pay for it. This is shown by the negative coefficient which is -0,074. This result is statistically insignificant since the p-value is 0.494 (more than 0.005). Thus, it can be argued that this hypothesis cannot be accepted.

The next hypothesis that is analysed further is:

**H3b:** Having high project attachment decreases when the reward system of a CF campaign is tangible compared to intangible.

The results for this hypothesis are shown below in Table 27:

**Table 27:** Descriptive analysis of the variable project attachment between 2 different groups

	PA							
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
<b>Control</b>	74	3.3649	.89845	.10444	3.1567	3.5730	1.00	5.00
<b>Treatment</b>	75	3.4489	.92105	.10635	3.2370	3.6608	1.00	5.00
<b>Total</b>	149	3.4072	.90780	.07437	3.2602	3.5541	1.00	5.00

**Table 28:** ANOVA analysis of reward type on project attachment

	PA				
	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	.263	1	.263	.318	.574
<b>Within Groups</b>	121.703	147	.828		
<b>Total</b>	121.966	148			

Table 27 displays the descriptives of the project attachment between two groups. The attachment that they perceive for the project is slightly higher for the treatment participants,

however the number is very similar for the control group. Before drawing any conclusion, the ANOVA analysis and Welch and Brown-Forsythe test (Appendix F, Figure 4) should be considered. According to table 28, there is no significant difference between the groups meaning that there is homogeneity in the variance and mean of each group. The Welch and Brown-Forsythe test shows similar insignificant results, thus, the hypothesis H3b can be rejected.

The last hypothesis stated that there is mediation effect like below:

**H3c:** *The effect of a CF reward system on willingness to pay is mediated by project attachment.*

Table 29 shows the results of the total, direct and indirect effect:

**Table 29:** Total, direct, indirect effect of mediation analysis of project attachment

<i>Total effect of X on Y</i>					
<b>Effect</b>	<b>SE</b>	<b>t</b>	<b>p</b>	<b>LLCI</b>	<b>ULCI</b>
1,2690	0,1798	7,0569	0.0000	0.9136	1,6244
<i>Direct effect of X on Y</i>					
<b>Effect</b>	<b>SE</b>	<b>t</b>	<b>p</b>	<b>LLCI</b>	<b>ULCI</b>
1,2518	0,1780	7,0321	0.0000	0,9000	1,6036
<i>Indirect effect of X on Y</i>					
<b>PA</b>	<b>Effect</b>	<b>BootSE</b>	<b>BootLLCI</b>	<b>BootULCI</b>	
	0,0136	0,0369	-0,0472	0,1057	

The results show that the total and direct affect are both statistically significant. However, the bootstrap confidence interval involves 0, meaning that there is not mediation effect of project attachment. Thus, it can be concluded that there is no mediation effect of project attachment on the relationship between reward type and willingness to pay. Hypothesis 4c in this case is rejected.

*Reward type, Project Viability and Willingness to Pay.*

The last hypothesis analyses the fourth mediator which is project viability. The mediation analysis is further analysed using bootstrapping method. The first hypothesis regarding the last mediator states:

**H4a:** The higher the project viability towards a CF campaign, the higher the willingness to pay.

Table 30 shows the results of the regression between project viability and willingness to pay:

**Table 30:** Regression of project viability vs willingness to pay

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
<b>(Constant)</b>	0,500	0,644		0,776	0,439
<b>PV</b>	0,435	0,120	0,299	3,635	<0,001

Notes: Dependent Variable: WTP

The results display that the higher the project viability, the higher the willingness of participants to pay. This effect is also statistically significant as the p-value is less than 0.05. Thus, it can be concluded that the hypothesis can be accepted.

Moreover, the next hypothesis stated the relationship between the independent variable and mediator:

**H4b:** Having high project viability increases when the reward system of a CF campaign is tangible compared to intangible.

Table 31 shows the result of the regression between IV and mediator:

**Table 31:** Descriptive analysis of the variable project viability 2 different groups

	PV							
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					<b>Control</b>	74		
<b>Treatment</b>	75	3.2089	.92800	.10716	2.9954	3.4224	1.00	5.00
<b>Total</b>	149	3.0716	.87040	.07131	2.9307	3.2125	1.00	5.00

**Table 32:** ANOVA analysis of reward type on project viability

PV					
	Sum of Squares	df	Mean Square	F	Sig.

<b>Between Groups</b>	2.847	1	2.847	3.830	.052
<b>Within Groups</b>	109.278	147	.743		
<b>Total</b>	112.125	148			

In terms of the variable project viability, in table 32, it is seen that the participants in treatment group value viability higher than in control. However, ANOVA results show that this difference between means is statistically insignificant with value 0.052 which is slightly more than 0.05. The Welch and Brown-Forsythe test (Appendix F, Table 4) are also insignificant, meaning that hypothesis H4b cannot be accepted.

Lastly, the mediation analysis of project viability is conducted below in Table 33 that test the hypothesis below:

**H4c:** *The effect of a CF reward system on willingness to pay is mediated by project viability.*

**Table 33:** Total, direct, indirect effect of mediation analysis of project viability

<b>Total effect of X on Y</b>					
<b>Effect</b>	<b>SE</b>	<b>t</b>	<b>p</b>	<b>LLCI</b>	<b>ULCI</b>
1,2690	0,1798	7,0569	0.0000	0.9136	1,6244
<b>Direct effect of X on Y</b>					
<b>Effect</b>	<b>SE</b>	<b>t</b>	<b>p</b>	<b>LLCI</b>	<b>ULCI</b>
1,1257	0,1669	6,7435	0.0000	0,7958	1,4556
<b>Indirect effect of X on Y</b>					
<b>PV</b>	<b>Effect</b>	<b>BootSE</b>	<b>BootLLCI</b>	<b>BootULCI</b>	
	0,1433	0,0873	-0,0002	0,3349	

From the results of the last mediation analyses, the p-values of the total and direct effect are significant however, 0 is included in the confidence interval. Thus, the hypothesis cannot be accepted that the effect of a CF reward system on willingness to pay is mediated by project viability.

Regarding the control variables, it would be interesting to see if some of the variable affect the relationship between reward types and willingness to pay. Before conducting the analysis, the correlation between the control variables is considered which is shown in Appendix

G. There are significant correlations between the control variables age, experience, and employment status and residency. A regression is conducted involving all the control variables in the table below. According to the results, age has the only significant effect. This means that the higher the age group the more likely of participants to pay for a campaign. The other control variables are insignificant.

**Table 34:** Regression table of the variables RT, Age, Experience, Residency, Employment status

	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
<b>(Constant)</b>	3.025	.544		5.564	<.001
<b>RT</b>	1.223	.187	.485	6.534	<.001
<b>Age</b>	.182	.090	.146	2.021	.045
<b>Experience</b>	-.230	.213	-.080	-1.081	.282
<b>Residency1</b>	-.013	.022	-.042	-.587	.558
<b>Employment status</b>	-.007	.043	-.012	-.173	.863

*Notes: Dependent Variable: WTP*

Moreover, since age was the only significant effect, another analysis which would consider all the subgroups of the categorical variable “age” and an interaction with the independent variable is presented in Table 35. The reference age group is the one between the ages 18-24 years old which is AgeGroup1. According to the results, the willingness to pay for age groups 2, 3 and 5 increases compared to the lowest age group, whereas for 4 it decreases compared to the lowest group. However, all these effects are insignificant since the p-value is larger than 0.05. In terms of the interaction term, the effect is positive. This means that the effect of the interaction of both age group and the reward type would be greater on the willingness to pay compared to the effect that they have individually. However, in this case this effect is insignificant which means that the above-mentioned statement cannot be concluded. Looking at the table the individual effects of each subgroup are insignificant, but the reward type is the only significant effect on the dependent variable.

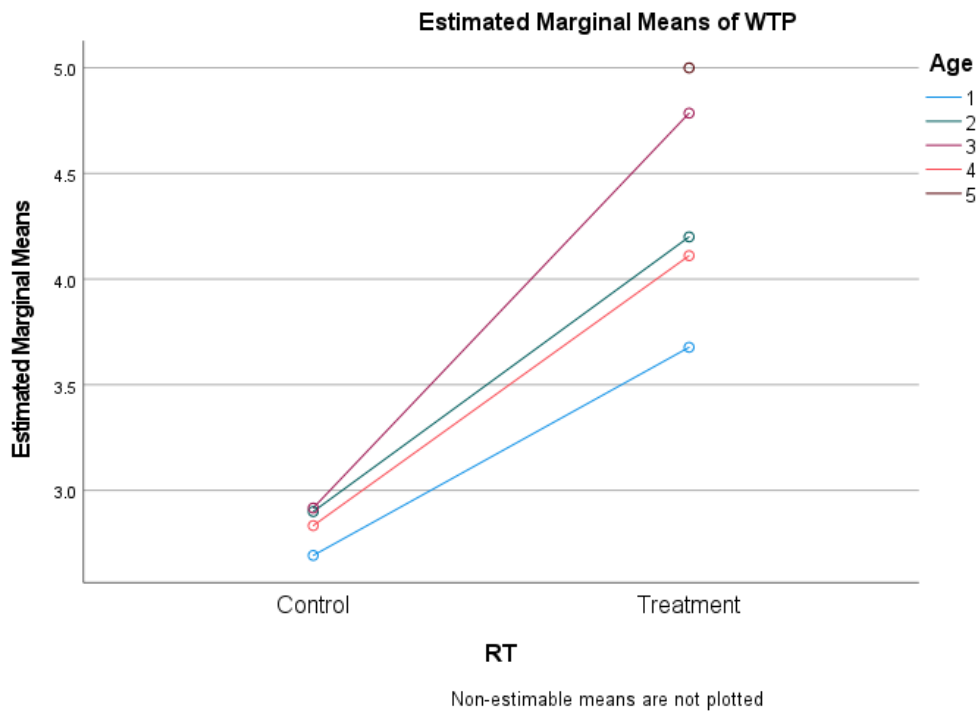


**Table 35:** Regression table of the subgroup of Age and interaction between Age and RT

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.656	.199		13.378	<.001
AgeGroup2	.252	.232	.094	1.086	.279
AgeGroup3	.456	.322	.137	1.414	.160
AgeGroup4	-.096	.446	-.023	-.216	.829
AgeGroup5	.382	1.267	.025	.302	.763
RT	.825	.404	.327	2.042	.043
InteractionAgeRT	.227	.182	.232	1.248	.214

Notes: Dependent Variable: WTP

After doing a univariate test, the plot shown in Figure 3 shows how the willingness to pay changes for each group of ages in both control and treatment effect. The highest estimated marginal means of WTP is for group 5 followed by group 3, 2, 4 and lastly the lowest group age which is 18-24 years old. All these effects are higher in the treatment group than in the control group which is like the results of the regression. However, the univariate test is also insignificant, so we cannot conclude that there is an interaction effect of age and rewards. The willingness to pay of participants is mainly affected by the reward type.



**Figure 3:** Estimated marginal means of WTP of each age group in two groups.

Lastly, to summarize all the results of this section, Table 36 states all the hypothesis is presented followed with each of their significance based on the tests that were conducted. As it was concluded, the hypotheses that were accepted are **H2a, H2b, H2c, H4a**.

**Table 36:** Summary of all the hypothesis statements and their significance

Hypothesis	Significance
<b>H1a:</b> Higher perceived risk attitude towards a CF campaign decreases the willingness to pay.	Rejected
<b>H1b:</b> Perceived risk is higher for tangible CF campaign rewards than intangible rewards.	Rejected
<b>H1c:</b> The effect of a type of CF reward model on willingness to pay is mediated by perceived risk.	Rejected
<b>H2a:</b> Higher perceived trust towards a CF campaign positively influences the willingness to pay.	Accepted
<b>H2b:</b> Perceived trust is higher for tangible reward system of a CF campaign than intangible ones.	Accepted

<b>H2c:</b> <i>The effect of a CF reward system on willingness to pay is mediated by perceived trust.</i>	Accepted
<b>H3a:</b> <i>The higher the project attachment towards a CF campaign, the higher the willingness to pay.</i>	Rejected
<b>H3b:</b> <i>Having high project attachment decreases when the reward system of a CF campaign is tangible compared to intangible.</i>	Rejected
<b>H3c:</b> <i>The effect of a CF reward system on willingness to pay is mediated by project attachment.</i>	Rejected
<b>H4a:</b> <i>The higher the project viability towards a CF campaign, the higher the willingness to pay.</i>	Accepted
<b>H4b:</b> <i>Having high project viability increases when the reward system of a CF campaign is tangible compared to intangible.</i>	Rejected
<b>H4c:</b> <i>The effect of a CF reward system on willingness to pay is mediated by project viability.</i>	Rejected

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## **Discussion and Conclusion**

This chapter will provide a summary of the main results and an interpretation of them. Moreover, a reflection of the results will be discussed based on the literature review that was done in the previous chapters. Lastly, the main conclusions will be presented in the end by answering the main question of this research.

### **Discussion**

To analyse the effect of reward types of a crowdfunded project and individual determinants such as perceived risk, perceived trust, project attachment and project viability on willingness to pay for one, hypothesis were created to build a model for analysis. This model was created based on various literature and was further analysed by using regressions like linear and ANOVA and mediation analysis.

The first hypothesis concerned the effect of perceived risk on willingness to pay and its mediation effect between the relation of reward type and willingness to pay. According to the results presented in the previous chapter, higher risk attitude towards a CF campaign decreases the willingness to pay, however this effect was insignificant. The same negative effect was also concluded in Demirgüneş' (2015) study with the difference that there was statistically significant result in this effect similarly to Huang (2021). These results show that the paper of Baber and Fanea-Ivanovici (2021) which contradicted the other research concluding that perceived risk positively affect the involvement of consumers in CF can be disproved. However, the insignificant results make it impossible to draw a definite conclusion on the negative effect of perceived risk on willingness to pay. Moreover, according to Zhao, Harris, and Lam (2019) this affect is present when there is a specific reward system involved in a CF project. According to our results, there was no difference between the willingness to pay for the two types of reward systems tangible and intangible and lastly there was no significant mediation effect of perceived risk between reward type and willingness to pay which also contradicts the results of the study of Zhao, Harris, and Lam (2019). Although many papers have proven a statistically significant effect of perceived risk on willingness to pay, there could be some limitations in terms of the items that represented perceived risk in this study that could have led to insignificant result. During the factor analysis for each variable, only 2 items were considered to represent perceived risk. This means that the

way perceived risk is expressed might affect the way participants answered questions in the survey.

Moreover, the results on the effect of the reward type on willingness to pay were statistically significant. There was higher willingness to pay when it comes to a tangible reward than a non-tangible one. This result is in line with the study of Wei Shi (2018) which also stated that individuals usually are more prone to invest in products or services that are tangible (material) ones rather than intangible (symbolic) ones. A way to interpret this result is that usually people are focused on things that bring the highest utility and value to them. Considering the reward that was offered in the campaign presented in the survey an invite to a garden party with the staff of the movie project or winning a prop from set have more value to participants than choosing to be mentioned in social media or in credits. Having a tangible reward, as it was mentioned before gives individuals “a sense of elevated status” (Wei Shi, 2018).

The second hypothesis analysed the effects of reward type, perceived trust on willingness to pay. According to the results, the higher perceived trust on crowdfunded campaigns, the higher the willingness to pay for a movie project. This is in line with the conclusion that Baber and Fanea-Ivanovici (2021) draw on perceived trust, where they state that perceived risk positively affects the intention to participate in CF projects. Moreover, there is also significant difference between investing when you are given a tangible reward and rather than an intangible one. This difference was also mentioned in the study of Cavalcanti Junqueira, and Soetano, (2022) where they emphasize that trustworthiness comes from the campaign information and how one manages the reward system. Lastly perceived trust can be used as a mediator between the reward type and the participants willingness to pay. Similarly, in their study Zhang, Zhang, and Gupta, (2022) mention that being socially interacted in a reward-based CF project increase the trust and the engagement to participate in investment activity.

The third hypothesis considers the effect of project attachment on willingness to pay and its mediating effects. According to the results the higher the project attachment that an individual has on a CF campaign the lower the willingness to pay for it. These results contradict what Herrero, Hernández-Ortega, and San Martín (2020) have stated on their study, concluding that project attachment positively influence the intention to invest on a certain project posted in a crowdfunding platform. However, the result from this research was insignificant which means

that the contradiction could not be taken into consideration. Moreover, there was no difference between how they perceive project attachment when the reward was tangible or intangible and the mediation effect of project attachment was also not significant. This also contradicts the study done before as they state that if the reward type of the movie project offered is tangible the project attachment towards the movie project would decrease in a RBCF model. Since project attachment can be considered as an intrinsic motivation, the variety of the participants and what they consider attachment could have affected the results. This means that when an individual is presented two new campaigns in the survey, that feeling of how unknown they are in a platform where you must invest, can be used as an unconscious bias, and prevent the understanding of the concept of attachment.

Regarding the last hypothesis which considers project viability, the results presented in the previous chapter show that the higher the project viability that an individual has on a CF campaign the higher the willingness to pay for it and is rather significant. This is in line with the study of Herrero, Hernández-Ortega, and San Martín (2020) where they state that if customers believe that a certain crowdfunded project has a high viability, they are more likely to have high intentions to fund it. Furthermore, there was no difference between how individuals perceived viability when the reward was tangible or intangible in a CF campaign and the mediation effect of project viability was also not significant. In the contrary, in already existing literature it is stated that intangible rewards tend to increase the project viability. An interpretation of this contrasting results could be that this study was limited to a certain type of reward and on a specific project. There might be other control variables that could affect the perception of viability besides trust such as the type of information displayed, or the amount people have invested that could affect the answer of participants.

Lastly, age group was the only variable with significant effect from the control variables. An interaction of reward type and age group was also analysed and resulted in a positive effect but not significant. The subgroups of age were also insignificant in the model with the interaction term. The only positive significant effect was reward type, which means that the willingness to pay for a CF campaign increases more when the campaign contains a tangible reward rather than an intangible one.

## Conclusion

Crowdfunding platforms' popularity has increased in terms of offering projects in different fields such as tech products, sports, music, and movie sector. However, because of the high competition and the large number of financial amounts that movies usually need make it harder for entrepreneurs to succeed. This research tried to provide insights on some of the main factors that could influence this success. The restated research question is: "*What is the effect of crowdfunding campaign reward types and individual behaviour determinants on willingness to pay in the movie industry?*". To give an answer to this question, a model with four mediators (perceived risk, perceived trust, project attachment and project viability) was build based on literature study that affect the relationship of reward type and willingness to pay. To test the main four hypothesis and the sub hypotheses, a survey was created with 149 participants and the data was further used to gather the main results using SPSS, and methods such as factor analysis, ANOVA, linear regression, and mediation analysis.

To answer the research question, the results from the study are taken into consideration. Regarding the effect of reward type on willingness to pay, it can be concluded that participants are more willing to pay for a movie project that offers a tangible reward rather than an intangible one. Furthermore, in terms of the individual behaviour determinants, only perceived trust has a significant mediation effect between reward type and willingness to pay and a direct affect on willingness to pay. There is also a significant positive effect of project viability on willingness to pay. This means that participants' willingness to pay increases if their perceived viability of a project is high. On the other hand, for the other mediators it is impossible to draw a conclusion due to the insignificant effects that they have.

## **Limitations and Implications**

### **Limitations**

The research conducted was mainly based on conforming to reliability and validity tests and rules, so the results are as valid as possible. However, there are various limitations that might have affected both the reliability and validity of the results. One of the limitations that might happen in terms of reliability that some of the participants might have not answered truthfully although it might have passed the checks that were used in the survey to prevent this. Such behaviour might have affected the insignificance of some of the results that were retrieved. Moreover, most participants did not have any experience with investing in a crowdfunding project which might have limited the understanding of the questions and hence, the truthfulness on answering them. This could also hurt both the validity and reliability of the results.

Regarding participants' bias, the fact most of the individuals that answered the questions of the survey are mostly people who are either family, friends or in the social network that is close to the researcher, might affect the results of study increasing bias. Involving more random participants or an equal number of people who have experience and those who do not might have changed the results. Furthermore, time is also a factor that limits the validity of the result. To conduct this research, there was a limited time given. In a larger span of time, for example one year, one could gather more participants, and thus, expand the sample. Moreover, there was a limit of the resources that could have been used for this research including only some of the academic papers that are provided by the university. There are various resources that could have brought more insights and perspective on concepts of crowdfunding or factors that affect its success.

One other factor that could have affected the analysis is the use of several items to represent the concept of the variables. From the results of the factor analysis, I had to remove several items due poor representation of them. Some alternative ways of explaining the concepts that were not extracted could have made the results more valid. Specifically for the variable perceived risk, the items were relatively long, which might have affected the attention and understanding of the concept from the participants.



## **Managerial implications**

The concept of crowdfunding is broadly used in several fields as it has been mentioned before. Movie sector is one of the fields that is the most difficult to get investments. This research could prove useful to different entrepreneurs or directors that are interested in creating and publishing movies but can not afford it. They could use the insights to build trust of participants and use effective reward system that could help them succeed. By offering reward types that align with the preferences and motivations of potential investors and optimizing the campaigns, they can increase the likelihood of successful funding.

By analysing perceived trust, movie producers could also work on building trust by being as transparent as they can about the project details, financials, and timelines. They could also build different marketing strategies by offering refunds and ensuring clear communication. Moreover, marketers can modify their messaging and marketing techniques to appeal to various investor types based on the unique behaviour variables discovered via the research. For instance, risk-averse investors may respond favourably to ads emphasizing the project's stability and minimized risks, but investors motivated by project attachment may be more receptive to messaging emphasizing the emotional and personal connection to the film.

Marketers could also use pricing offers to reinforce the reward system that they strategically chose to offer. They could use different price ranges based on the reward they get. Based on the results of this research, they could use a higher range of price to get a tangible reward and a lower one if they receive the intangible reward. In this way, the utility of investors could be increased, and the producers of the project could also receive their desired amount of investment.

In conclusion, the results of the study can help decision-makers and direct marketing initiatives in the crowdfunding and film industries. Understanding how different reward kinds interact with different behaviour determinants can result in more successful crowdfunding campaigns, more money raised, and better relationships with backers.

## **Future research**

Future research that could be done to explore and further understand how to get best results in crowdfunding projects could be adding factors that could bring some effective results.

Some of the factors that could further be explored is the type of information showed on the campaigns such as the goal of investment, the progress of the funding, days left until funding is closed, positioning of the features in the campaign or usage of a trailer. Moreover, a mixed-methods research, using both qualitative and quantitative research, could also be useful to understand the variables chosen. This could be in the form of interviews or focus groups where you could get more insight and knowledge about the perspective of participants before conducting an experiment. Comparing the effect of reward type and individual behavior determinants across different platforms could also be an interesting addition to the research to see if some of them are more used than others.

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# Appendix

## Appendix A

### *Thesis Survey Master*

---

Q1 Dear participants,

Thank you for participating in this survey!

My name is Griselda Delija and this research is conducted in Erasmus University Rotterdam for a master subject, related to marketing, more specifically crowdfunding campaigns and individual investing behavior. All information that is going to be collected from this survey is for research purpose only.

This survey only takes about 5-7 minutes of your time.

RISKS: No significant risk is associated with online study.

PARTICIPATION: Your participation is voluntary. You may stop participating at any time by closing the browser window. Partial data will not be analyzed.

CONFIDENTIALITY: Your responses are anonymous and strictly confidential. For research purposes we also collect information about how you interact with the questionnaire. The data collected do not include any information about your location, such as your IP address. We will not be accessing any personally identifying information about you. Any reports and presentations about the findings from this study will not include any information that could identify you.

If you have any question, please do not hesitate to contact me in the email below:  
- 534034gd@eur.nl

Thank you for your time!

---

Q2 Do you consent?

Yes (1)

No (2)

---

Q3 Before diving in the questions, here is a little bit of information on crowdfunding and how it works.

The definition of crowdfunding can be explained as a financing technique where entrepreneurs

can develop new ideas, products, innovations online in return for financial funds from anonymous individuals (backers) that decide to invest. If you decide to invest in a project, you can get different non-financial rewards depending on the amount you invest.

---

Q4 Imagine you are a backer that is constantly trying to invest in potential successful movies. You are a big fan of movies, and you are browsing Indiegogo, a famous crowdfunding platform.

Please look carefully at this campaign of this movie project and the reward offered and answer the following questions:

---

Q5 Imagine you are a backer that is constantly trying to invest in potential successful movies. You are a big fan of movies and you are browsing Indiegogo, a famous crowdfunding platform.

Please look carefully at this campaign of this movie project and the reward offered and answer the following questions:

---

Q6 What type of reward was offered in the campaign?

\_\_\_\_\_

---

Q7 Please select how willing you would be to invest in this project.

	Very not willing (1)	Somewhat not willing (2)	Neither willing nor not willing (3)	Somewhat willing (4)	Very willing (5)
Willingness to invest in the project (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q8 Please read carefully the statements listed below. Select the extent that you agree/disagree with these statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
If I invest in the film crowdfunding platform, I may suffer a monetary loss due to fraud. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be concerned about whether the film crowdfunding platform appropriately manage funders' private information. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I support a project from the film crowdfunding platform, I would be concerned about whether the project is successful. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be concerned if the crowd fundraiser did not respect deadlines throughout the campaign and then during project implementation. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 Please read carefully the statements listed below. Select the extent that you agree/disagree with these statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I trust the information on this crowdfunding platform. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that this crowdfunding platform is trustworthy for financial transactions. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe this crowdfunding platform keeps their promises (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 Please select "strongly agree" to show you are paying attention to this question.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Click "Strongly agree" (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 Please read carefully the statements listed below. Select the extent that you agree/disagree with these statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Offering my help to this project would seem important to me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offering my help to this project would motivate me a lot. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offering my help to this project would make me feel good. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 Please read carefully the statements listed below. Select the extent that you agree/disagree with these statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I would say the probability of this project reaching its objectives is very high. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would say the probability of this project being profitable is very high. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would say the probability that this project will obtain good results is very high. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q13 Have you had any experience in investing in a crowdfunding project before (such as in Indiegogo, Kickstarter, GoFundMe etc)?

- Yes (1)
- No (2)

Q14 What age group do you pertain to?

- 18-24 years old (1)
  - 25-35 years old (2)
  - 36-49 years old (3)
  - 50-64 years old (4)
  - 65+ years old (5)
- 

Q15 What is your gender?

- Male (1)
  - Female (2)
  - Non-binary / Third gender (3)
  - I prefer not to say (4)
- 

Q16 Where do you reside?

Click to write Choice 1 (4)

▼ Afghanistan (1) ... Zimbabwe (193)

---

Q17 What is your employment status?

- Employed full-time (1)
- Employed part-time (2)
- Unemployed looking for work (3)
- Unemployed not looking for work (4)
- Retired (5)
- Self-employed (7)
- Prefer not to say (8)

**Appendix B**

***Bivariate correlation matrix***

	PR1	PR2	PR3	PR4	PT1	PT2	PT3	PA1	PA2	PA3	PV1	PV2	PV3
PR1	1,000	,307	,232	,090	-,365	-,340	-,395	,041	,020	-,029	-,112	-,033	-,031
PR2	,307	1,000	,124	,258	-,329	-,336	-,311	-,117	-,007	-,125	-,081	,158	,012
PR3	,232	,124	1,000	,515	-,146	-,143	-,266	-,056	-,187	-,088	-,130	-,237	-,103
PR4	,090	,258	,515	1,000	-,207	-,181	-,293	-,082	-,091	-,074	-,185	-,179	-,065
PT1	-,365	-,329	-,146	-,207	1,000	,670	,559	,221	,182	,124	,392	,183	,397
PT2	-,340	-,336	-,143	-,181	,670	1,000	,571	,282	,264	,201	,331	,113	,341
PT3	-,395	-,311	-,266	-,293	,559	,571	1,000	,093	,042	,079	,358	,271	,227
PA1	,041	-,117	-,056	-,082	,221	,282	,093	1,000	,771	,540	,366	,309	,490
PA2	,020	-,007	-,187	-,091	,182	,264	,042	,771	1,000	,620	,344	,278	,494
PA3	-,029	-,125	-,088	-,074	,124	,201	,079	,540	,620	1,000	,341	,087	,336
PV1	-,112	-,081	-,130	-,185	,392	,331	,358	,366	,344	,341	1,000	,639	,708
PV2	-,033	,158	-,237	-,179	,183	,113	,271	,309	,278	,087	,639	1,000	,590
PV3	-,031	,012	-,103	-,065	,397	,341	,227	,490	,494	,336	,708	,590	1,000
PR1		<,001	,002	,138	<,001	<,001	<,001	,310	,404	,361	,087	,345	,354
PR2	,000		,066	,001	,000	,000	,000	,079	,467	,065	,164	,027	,445
PR3	,002	,066		,000	,038	,041	,001	,250	,011	,142	,056	,002	,106
PR4	,138	,001	,000		,006	,013	,000	,160	,135	,184	,012	,014	,217
PT1	,000	,000	,038	,006		,000	,000	,003	,013	,065	,000	,013	,000
PT2	,000	,000	,041	,013	,000		,000	,000	,001	,007	,000	,086	,000
PT3	,000	,000	,001	,000	,000	,000		,130	,307	,169	,000	,000	,003

PA1	,310	,079	,250	,160	,003	,000	,130	,000	,000	,000	,000	,000
PA3	,361	,065	,142	,184	,065	,007	,169	,000	,000	,000	,145	,000
PV1	,087	,164	,056	,012	,000	,000	,000	,000	,000	,000	,000	,000
PV2	,345	,027	,002	,014	,013	,086	,000	,000	,000	,145	,000	,000
PV3	,354	,445	,106	,217	,000	,000	,003	,000	,000	,000	,000	,000

Note: Determinant = .003

### Appendix C Component Correlation Matrix

Component	1	2	3	4
1	1.000	-.118	.257	-.067
2	-.118	1.000	-.173	.259
3	.257	-.173	1.000	-.056
4	-.067	.259	-.056	1.000

Notes: Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

### Appendix D Rotated Component Matrix

	Component			
	1	2	3	4
PR1	-,642	,103	,041	,135
PR2	-,620	-,170	,331	,190
PR3	-,108	-,055	-,105	,855
PR4	-,176	-,051	-,056	,830
PT1	,790	,112	,282	,005
PT2	,790	,232	,169	,017
PT3	,731	-,073	,288	-,222
PA1	,074	,841	,245	,001
PA2	,001	,875	,230	-,093
PA3	,076	,819	,033	-,046
PV1	,258	,262	,779	-,062
PV2	-,028	,060	,875	-,212

<b>PV3</b>	,176	,403	,763	,057
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Notes: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

## Appendix E

### Rotated Component Matrix

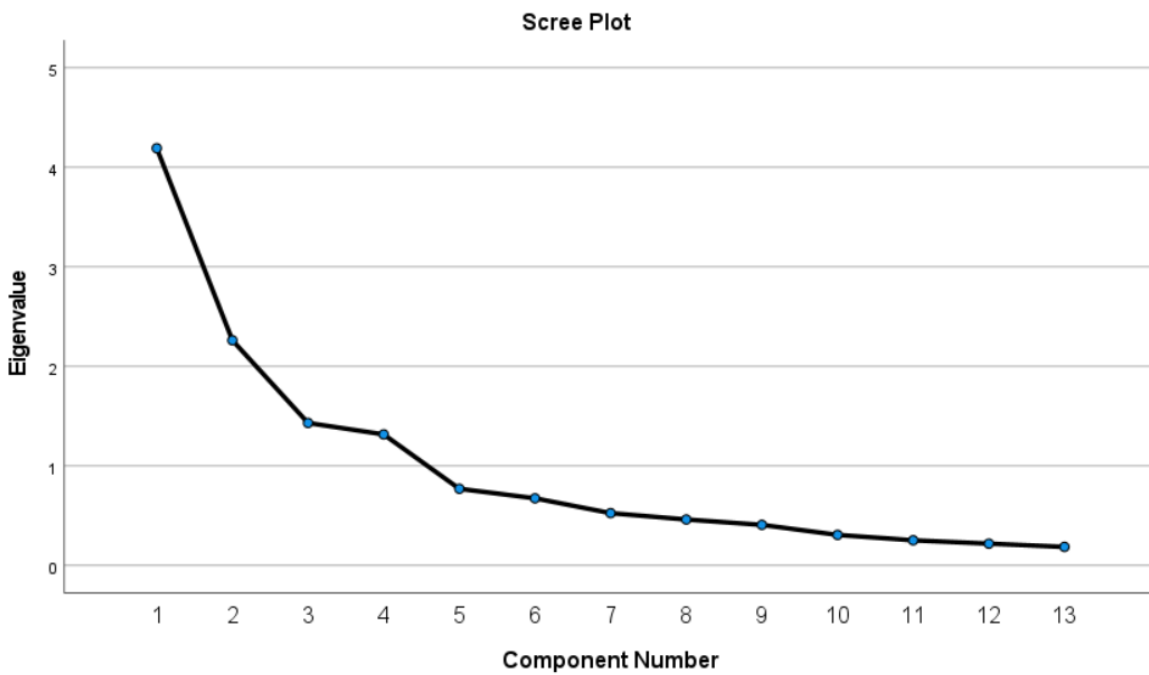
Figure 1: Total Variance Explained by using principal component analysis.

Component	Total Variance Explained								
	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.191	32.239	32.239	4.191	32.239	32.239	2.733	21.020	21.020
2	2.262	17.396	49.635	2.262	17.396	49.635	2.496	19.197	40.216
3	1.431	11.009	60.645	1.431	11.009	60.645	2.385	18.349	58.566
4	1.316	10.122	70.767	1.316	10.122	70.767	1.586	12.201	70.767
5	.770	5.921	76.688						
6	.674	5.186	81.874						
7	.525	4.038	85.913						
8	.461	3.547	89.460						
9	.407	3.131	92.591						
10	.306	2.356	94.947						
11	.252	1.940	96.888						
12	.219	1.681	98.568						
13	.186	1.432	100.000						

Extraction Method: Principal Component Analysis.

Figure 2: Scree Plot with Eigenvalue and component number





## Appendix F

### Robust Tests of Equality of Means

**Table 1:** Welch and Brown-Forsythe test for reward type on perceived risk.

<i>PR</i>				
	Statistic <sup>a</sup>	df1	df2	Sig.
<b>Welch</b>	.121	1	145.917	.728
<b>Brown-Forsythe</b>	.121	1	145.917	.728

Notes: a. Asymptotically *F* distributed.

**Table 2:** Welch and Brown-Forsythe test for reward type on willingness to pay

<i>WTP</i>				
	Statistic <sup>a</sup>	df1	df2	Sig.
<b>Welch</b>	49.916	1	143.387	<.001
<b>Brown-Forsythe</b>	49.916	1	143.387	<.001

Notes: a. Asymptotically *F* distributed.

**Table 3:** Welch and Brown-Forsythe test for reward type on perceived trust

<i>PT</i>				
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	Statistic <sup>a</sup>	df1	df2	Sig.
<b>Welch</b>	13.994	1	143.609	<.001
<b>Brown-Forsythe</b>	13.994	1	143.609	<.001

Notes: a. Asymptotically F distributed.

**Table 4:** Welch and Brown-Forsythe test for reward type on project attachment

<i>PA</i>				
	Statistic <sup>a</sup>	df1	df2	Sig.
<b>Welch</b>	.318	1	146.981	.574
<b>Brown-Forsythe</b>	.318	1	146.981	.574

Notes: a. Asymptotically F distributed.

**Table 5:** Welch and Brown-Forsythe test for reward type on project viability

<i>PV</i>				
	Statistic <sup>a</sup>	df1	df2	Sig.
<b>Welch</b>	3.838	1	143.917	.052
<b>Brown-Forsythe</b>	3.838	1	143.917	.052

Notes: a. Asymptotically F distributed.

## Appendix G

### Correlation of the overall variables

		Experience	Age	Gender	Residency	Employment	WTP	RT	PT
					1	status			
<b>Experience</b>	<i>Pearson Correlation</i>	1	-.128	-.067	-.135	.016	-.217**	-.256**	-.241**
	<i>Sig. (2-tailed)</i>		.119	.418	.101	.847	.008	.002	.003
	<i>N</i>	149	149	149	149	149	149	149	149
<b>Age</b>	<i>Pearson Correlation</i>	-.128	1	-.046	-.051	-.149	.180*	.040	.170*
	<i>Sig. (2-tailed)</i>	.119		.573	.538	.070	.028	.630	.038
	<i>N</i>	149	149	149	149	149	149	149	149
<b>Gender</b>	<i>Pearson Correlation</i>	-.067	-.046	1	-.062	-.185*	-.123	-.151	-.126
	<i>Sig. (2-tailed)</i>	.418	.573		.453	.024	.134	.067	.126
	<i>N</i>	149	149	149	149	149	149	149	149

<b>Residency</b>	<i>Pearson Correlation</i>	-.135	-.051	-.062	1	.291**	.034	.153	-.016
<b>1</b>	<i>Sig. (2-tailed)</i>	.101	.538	.453		<.001	.679	.063	.846
	<i>N</i>	149	149	149	174	174	149	149	149
<b>Employment status</b>	<i>Pearson Correlation</i>	.016	-.149	-.185*	.291**	1	.016	.112	.065
	<i>Sig. (2-tailed)</i>	.847	.070	.024	<.001		.850	.175	.433
	<i>N</i>	149	149	149	174	174	149	149	149
<b>WTP</b>	<i>Pearson Correlation</i>	-.217**	.180*	-.123	.034	.016	1	.503**	.492**
	<i>Sig. (2-tailed)</i>	.008	.028	.134	.679	.850		<.001	<.001
	<i>N</i>	149	149	149	149	149	149	149	149
<b>RT</b>	<i>Pearson Correlation</i>	-.256**	.040	-.151	.153	.112	.503**	1	.295**
	<i>Sig. (2-tailed)</i>	.002	.630	.067	.063	.175	<.001		<.001
	<i>N</i>	149	149	149	149	149	149	149	149
<b>PT</b>	<i>Pearson Correlation</i>	-.241**	.170*	-.126	-.016	.065	.492**	.295**	1
	<i>Sig. (2-tailed)</i>	.003	.038	.126	.846	.433	<.001	<.001	
	<i>N</i>	149	149	149	149	149	149	149	149

Notes: \*\*. Correlation is significant at the 0.01 level (2-tailed). \*. Correlation is significant at the 0.05 level (2-tailed).

## Appendix H

### Literature review summary

Literature study	Main topic	Mediator/Moderator and theories explained	Results	Method
Baber & Fanea-Ivanovici (2021)	Main intentions to crowdfund movies and web series in exchange of a capital share as a reward	Mediator: Perceived trust and risk	Perceived trust was found to positively influenced by intrinsic motivation and perceived risk was positively influence by campaign involvement.	A survey with 432 participants from Asia and Europe
Huang, (2020).	Relationship between film fan's willingness to	Mediator: perceived convenience and risks and individual characteristics	Based on structural equation modeling, it was found that fans of FCPs tend to sponsor projects,	Survey with 505 respondents in Asia.

	pay by film crowdfunding including material and non-material reward.	(gender, age, income, monthly investments, expenditure)	and their WPFC is impacted by non-material feedback more than material feedback. Additionally, perceived risks of FCPs play a significant mediating role in the relationship between WPFC and FC incentives for film fans, whereas perceived convenience of FCPs did not have a significant mediating effect.	
Wei Shi, (2018)	Examines consumers' responsiveness to different factors related to reward structures on crowdfunding platforms. Rewards vs reward tiers	-	According to the results, setting reward limits has a notable impact on backers' interest, but this impact differs based on reward tiers. Higher tiers tend to reduce price sensitivity. The type of reward also plays a role, with material rewards being more favourably received than symbolic rewards on crowdfunding platforms, particularly in lower reward tiers.	The data were collected from a popular crowdfunding platform in the United States. There are 2,262 reward programs across 219 projects in our dataset.

Shin & Lee, (2020).	Effects of consumption value and consumer trust in crowdfunding participation intention	Moderator: consumer innovation	The study found that economic value, perceived trust and ability, and benevolence all have a substantial impact on crowdfunding participation intentions. Innovation was found to have a moderating effect, which was significant only in relation to economic value and benevolence.	Questionnaire with 182 respondents
Cappa, Franco, Ferrucci, & Maiolini, (2021).	The impact of different types of products and rewards on the amount of funds raised in reward-based crowdfunding.	(Signalling Theory, Self-Determination Theory)	This article's findings contribute to the scientific understanding of RBCF and offer guidance to entrepreneurs on tailoring their call for funding based on the type of product they are proposing to the crowd.	Within-subject survey-based experiment. A questionnaire was administered to university students, aged between 20 and 26, with different levels of education, i.e., undergraduate and graduate

<p>Herrero, Á., Hernández-Ortega, &amp; San Martín, (2020).</p>	<p>The influence of project attachment and business viability in funders' behavioural intentions in reward-based crowdfunding</p>	<p>Moderator: campaign characteristics</p>	<p>Funders' intentions are mainly influenced by their attachment of the project and business viability plays a secondary role in influencing intentions.</p>	<p>Survey questionnaire: a tourist attraction that would offer to visitors an ecotourism experience in a wine cellar placed in their region</p>
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