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# Minding the Gap - An Expectation-Disconfirmation Approach to Reward-Based Crowdfunding

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# MINDING THE GAP – AN EXPECTATION-DISCONFIRMATION APPROACH TO REWARD-BASED CROWDFUNDING

## *Research in Progress*

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## Abstract

*The remarkable growth of crowdfunding has sparked academic interest. By collecting small contributions from a large number of individuals, entrepreneurs, artists and other individuals and organizations can raise considerable amounts of money. Despite the increasing academic interest in this topic, there still appears to be a lack of understanding regarding the factors that determine individuals' intentions to contribute to projects. In this research-in-progress paper, we propose a research model that examines future funding intentions by using Expectation-Disconfirmation Theory (EDT). By applying our research model to reward-based crowdfunding, we intend to shed light on the ways in which previous funding experiences influence future funding intentions. Through the data collected by this study, our research will contribute to the body of literature on reward-based crowdfunding and EDT. It will also provide practical implications for crowdfunding platforms and project initiators, providing them indications for their management of expectations.*

*Keywords: Crowdfunding, E-commerce, Behavior, Expectation-Disconfirmation Theory.*

## 1 Introduction

From films and music to apps and technology, crowdfunding (CF) has become a viable alternative for artists and entrepreneurs seeking external funding (Belleflamme et al., 2014). The global volume of money raised through CF has increased sharply in the past years, rising from $530 million in 2009 to $2.8 billion in 2012 (Massolution, 2012). This development has sparked academic interest in the mechanisms of CF. However, there still appears to be a lack of understanding regarding the funding behavior of backers. The research proposed in this paper intends to analyze backers' funding intentions by applying the Expectation-Disconfirmation Theory (EDT). In doing so, we intend to contribute to research in the context of funding behavior and to discover and analyze practical considerations for project initiators and CF platforms with respect to the management of expectations.

Besides covering a wide range of projects, the types and processes of CF emerge in several ways. Using the type of value a backer receives in return for his funding as a distinguishing criterion, Bradford (2012) identified five different types of CF: (1) the donation model, i.e. backer receives no reward (apart from a feeling of benevolence), (2) the reward model, i.e. backer receives a non-financial reward, (3) the pre-purchase model (a subtype of reward-based CF), i.e. backer receives the product that the project initiator intends to create, (4) the lending model, i.e. backer receives financial returns, (e.g. interest), and (5) the equity model, i.e. backer receives financial returns (e.g. equity). CF that follows the pre-purchase model shows core parallels to e-commerce as backers in pre-purchase CF usually receive – at a discounted price – the item produced by the project initiator as a reward for their support. The pre-purchase model thus appears to be the type of CF most suitable to be analyzed by EDT,

a theory developed in consumer and marketing research. The analogy to e-commerce enables us to apply the EDT to the CF context. Further it can be noted that in the equity and the lending model, EDT appears to be less relevant since monetary returns are less likely to create unrealistic expectations. In a similar vein, it has been argued that EDT is only applicable to tangible goods (Oliver, 1980; Venkatesh and Goyal, 2010). Our proposed research will thus focus on pre-purchase CF.

It is likely that the reward is not the only factor that a backer takes into consideration when gauging his level of satisfaction. For instance, the feeling of having supported a promising idea or a remarkable project initiator might be just as important as a tangible award. In order to create a research design with sufficiently clear boundaries, our proposed research will exclude these other types of expectations and focus solely on the reward granted in the shape of a pre-sold product. Expectations related to the funding object appear to be most suitable to establish ties with e-commerce research. Our research may be considered as a first step in the application of EDT to CF. It will open doors for future research addressing other types of expectations as well as other types of CF models.

In this research paper, we will first discuss the EDT, summarize criticisms raised in this context and explain why the EDT can be applied in the context of CF. We will then develop the hypotheses and introduce our research model. Building on this, we will explain how we intend to conduct our research. Finally, we will discuss implications for theory and practice.

# 2 Theoretical Background

## 2.1 Expectation-Disconfirmation Theory

EDT was initially proposed by Oliver in the field of consumer behavior and marketing research (Oliver, 1980; Venkatesh and Goyal, 2010). According to EDT, consumers' satisfaction is, in part, determined by the level and direction of disconfirmation of their initial expectations (Oliver, 1980; Premkumar and Bhattacherjee, 2008). Consumer satisfaction is regarded as a key determinant for consumers' post-purchase behavior, including repurchase or continuance of use intentions (Bhattacherjee, 2001; Oliver, 1980; Venkatesh and Goyal, 2010).

EDT can be described as a five-step process. During the first step, consumers form specific beliefs or expectations of products or services before purchasing (Venkatesh and Goyal, 2010). These expectations are, for example, influenced by product information, organizational promotion, media reports and feedback from prior users (Haistead et al., 1994; Premkumar and Bhattacherjee, 2008). Additionally, research has found a positive relationship between cultural values and product expectations (Au et al., 2002). Second, consumers use, consume or experience the purchased product or service and develop their own perception of the product's or service's actual performance (Premkumar and Bhattacherjee, 2008). Third, they assess the performance of the product or service by using their expectations as a reference level (Oliver, 1980). This assessment can have three generic results: If performance exceeds expectations, consumers build a positive disconfirmation. If performance meets expectations, consumers build confirmation. If performance falls below expectations, consumers build negative disconfirmation (Khalifa and Liu, 2004; Oliver, 1980). Disconfirmation is defined as the discrepancy between expectations and the actually perceived performance (Meng et al., 2004; Venkatesh and Goyal, 2010). As a fourth step, consumers form feelings of satisfaction. The level of satisfaction depends on the level of disconfirmation and on the expectation on which that disconfirmation was built (Premkumar and Bhattacherjee, 2008). Lastly, consumers develop repurchase or usage continuance intentions that are based on their level of satisfaction (Bhattacherjee, 2001).

Most of the criticism that has been raised in the context of EDT is based on the fact that consumers' satisfaction is assumed to be solely determined by their level of disconfirmation. Au et al. (2002) stress that from the perspective of EDT, low expectations that are confirmed by a low perceived performance exert the same influence on satisfaction as high expectations that are confirmed by a high perceived performance. It seems reasonable, however, to assume that beside the expectations built by

consumers, a desire for a certain absolute performance impacts satisfaction (Khalifa and Liu, 2004). In this regard, an individual, whose expectations are slightly disconfirmed to the negative or positive, may still be satisfied or dissatisfied with a product or service.

## 2.2 Related Work

EDT has been applied in a number of fields (Shi et al., 2010). For instance, Oliver (1993) uses EDT to analyze automobile repurchase. In research building on Oliver (1980), Churchill and Surprenant (1982) demonstrated that in the case of durable products, satisfaction is not exclusively determined by disconfirmation. In this category of products, beyond its indirect influence through disconfirmation, actual perceived performance also directly impacts satisfaction (Churchill and Surprenant, 1982; Venkatesh and Goyal, 2010). Similarly, in cases where consumers have no or very limited experience with respect to a product or service, they may, to a certain extent, be unwilling or unable to form expectations and form their satisfaction primarily by perceived performance (Khalifa and Liu, 2004).

Lee (2010) applies (and extends) EDT to explain and predict users' continuance intentions with respect to e-learning services and Shi et al. (2010) use EDT to analyze the factors influencing users' continuance intentions to use Facebook. When first using EDT in the context of information system (IS) continuance, Bhattacherjee (2001) argued that some core similarities between users' continuance decisions and consumers' purchase decisions allowed for such application. In the context of CF, similar observations can be made when looking at the processes of funding and purchasing on an abstract level: First, the future funding (post-purchase) behavior follows an initial decision to fund (purchase). Second, the initial use of the funding reward (product or service) influences the funder's (consumer's) perception of performance. Lastly, the funder (consumer) is confronted with a situation in which he can choose whether or not to repeat the initial decision, by funding again (repurchasing). These core similarities allow for the application of EDT in the context of CF. Further, in pre-purchase CF campaigns, funders are treated as early customers, and are given the chance to access the products produced at an earlier date, better price or with other benefits (Mollick, 2014). This parallel supports the analogous applicability of EDT in this context.

# 3 Research Model and Hypotheses

By applying EDT in the context of pre-purchase CF, we intend to examine how the expectations towards a reward before reception of the reward ($t_1$) and the perceived performance of that reward after reception ($t_2$) ultimately affect backers' future funding intentions with respect to a specific project initiator, as well as with respect to a specific CF platform. We will further investigate how the prior experience with funding projects on the CF platform as well as with funding projects of the project initiator mediates this effect.

Expectations reflect customers' anticipation of a product's or service's performance (Churchill and Surprenant, 1982) and can be defined as a set of pre-exposure beliefs about a product (Olson and Dover, 1979) They are measured at a point in time that lies before the reception of a reward ($t_1$). The observation that barriers of touching, feeling and trying limit the examination of physical products in e-commerce (Forsythe and Shi, 2003) is similarly applicable in the context of CF. In e-commerce, previous experience with the seller and information sources such as product reviews, pictures and videos can be used to overcome these barriers to a certain extent. In CF, it appears even harder to overcome such barriers, as the products offered as rewards are often yet to be created. Even though prototypes might exist, it appears evident that the absence of reviews and other indicators of product characteristics limit the possibility for backers to build expectations. The same observation can be made when looking at the factors that influence expectations. Oliver (1980), like Helson (1959), suggests that expectations are, besides characteristics of the individual, determined by prior experience, brand connotations, and symbolic elements and the content of communications from salespeople and social referents. It appears evident that, apart from the communications of a salesperson, these determinants

are significantly less suitable for influencing expectations in the context of CF. The content of communication from the project initiator therefore crucially impacts the level of expectations. Backers need to fully rely on the information provided to them, as no one checks the information, and the quality of a reward. Further, CF platforms do not conduct an assessment of ideas.

It has been proven previously that expectations can influence perceptions of an event (Olshavsky and Miller, 1972; Spreng et al., 1996; Spreng and Page, 2003). In the context of CF, we anticipate expectations to positively impact perceived performance, as products created through CF are generally new and innovative, making potential performance outcomes highly ambiguous. In EDT, expectations are used as a reference level on the basis of which customers assess the performance they perceive. According to this assessment, customers build their level of disconfirmation (Bhattacherjee, 2001; Oliver, 1980). Disconfirmation represents the discrepancy between expectations and the actual experience (Venkatesh and Goyal, 2010). Oliver (1980) has initially suggested that disconfirmation is unrelated to expectation variables. However, Churchill and Surprenant (1982) demonstrated a negative relationship, i.e. high expectations are more likely to be negatively disconfirmed, while low expectations are more likely to be positively disconfirmed (Spreng et al., 1996). In the case of CF, it is reasonable to assume that expectations are, to a large extent, built based on what project initiators communicate. It is therefore not unlikely that project initiators create high expectations in order to get the crowd to contribute in the first place.

A combination of expectations and disconfirmation determines the level of satisfaction that, in turn, influences buyer's purchase and repurchase intention (Venkatesh and Goyal, 2010) Where the discrepancy between expectations and perceived performance is sufficiently low, customers rely on their initial expectations to build their level of satisfaction (Anderson, 1973; Lankton et al., 2014). This is what scholars from psychology refer to as assimilation effect, meaning that in certain situations an individual's judgment is positively correlated to the contextual information it perceives. A positive context stimulus results in a positive judgment, whereas a negative context stimulus results in a negative judgment (Schwarz and Bless, 2007).. In regard of EDT, this assimilation effect is observable in a certain latitude around the point of confirmation of expectations (Olshavsky and Miller, 1972). The occurrence of assimilation effects largely depends on whether or not the project initiator attempts to create realistic expectations.

If backers' expectations are confirmed or only insignificantly disconfirmed, we anticipate a positive impact of expectations on satisfaction. If backers' expectations are significantly disconfirmed, we expect better-than-expected outcomes to lead to positive disconfirmation as well as a positive level of satisfaction and worse-than-expected outcomes to lead to negative disconfirmation and a negative level of satisfaction We hypothesize:

*H1a: The expectation towards a reward has a positive impact on the perceived performance of the reward.*

*H1b: The expectation towards a reward has a negative impact on the disconfirmation with the reward.*

*H1c: The expectation towards a reward has a positive impact on the satisfaction with the reward.*

Perceived performance refers to a customer's beliefs regarding attributes of a product after a period of initial consumption (Bhattacherjee, 2001; Spreng et al., 1996). We measure perceived performance at a point in time after the reception of a reward ($t_2$). By comparing the perceived performance with their ex ante expectations, backers build their level of disconfirmation regarding a reward (Bhattacherjee, 2001). We expect a positive influence of perceived performance on disconfirmation as, holding expectations constant, the higher the perceived performance, the more likely it is that the perceived performance will exceed expectations (Lankton et al., 2014). Khalifa and Liu (2004) have noted that an individual's satisfaction might primarily and independently be driven by perceived performance in cases where the individual has no or little prior experience with the subject of evaluation. In line with this assumption, we expect a direct impact of perceived performance of a reward on satisfaction. In the context of CF, this assumption appears to be particularly applicable, given that lack of experience is present due to the innovative nature of products created through CF. Further, it is reasonable to assume that backers are aware of their limited possibility to build ex ante expectations. They might therefore

evaluate their satisfaction to some extent directly based on the perceived performance. We expect that an increased level of perceived performance leads to a higher level of satisfaction. We hypothesize:

*H2a: The perceived performance of a reward will positively influence the disconfirmation with the reward.*

*H2b: The perceived performance of a reward will positively influence the satisfaction with the reward.*

Disconfirmation refers to the difference between expectation and perceived performance (Meng et al., 2004; Venkatesh and Goyal, 2010). This difference can occur in three generic ways: negative disconfirmation, confirmation and positive disconfirmation (Khalifa and Liu, 2004; Oliver, 1980). We will regard disconfirmation on a scale ranging from negative disconfirmation over confirmation to positive disconfirmation. We expect to observe two effects when the level of disconfirmation moves from negative towards positive disconfirmation. Firstly, the level of satisfaction will increase (Venkatesh and Goyal, 2010). Secondly, the effect of disconfirmation on satisfaction will be stronger, the more the level of disconfirmation moves towards positive disconfirmation (Venkatesh and Goyal, 2010). As many backers have a limited amount of experience with CF and most funding objects are new and unique, backers are unlikely to build realistic expectations. We therefore expect that the level of disconfirmation will deviate significantly from the middle-point ("confirmation"), towards either negative or positive dissatisfaction. We hypothesize:

*H3: The disconfirmation with a reward has a positive influence on the backers' satisfaction with the reward.*

Satisfaction has been proven to be an overall indicator of customers' experience after purchasing products (Fornell, 1992) It has a great impact on consumers' buying behavior (Cardozo, 1965). Further, satisfaction can be seen as an emotional response to expectations, performance and quality of a purchased product (East et al., 2008). We expect that a backer's level of satisfaction will have an impact on his intention to fund any project presented on the CF platform in the future. As a consequence of a backer's low level of satisfaction with a certain reward, the backer may not be willing to fund any other project on the respective platform. On the other hand, a high level of satisfaction might increase a backer's intention to fund future projects on the same CF platform. We further propose that a backer's level of satisfaction will also have an impact on that backer's intention to fund future projects of the same project initiator who created the reward the level of satisfaction resulted from. In this instance, a backer's low level of satisfaction with a reward might discourage a backer to fund any future projects of this project initiator. In contrast, a higher level of satisfaction might increase a backer's intention to fund future projects of a certain project initiator. We hypothesize:

*H4a: A higher level of satisfaction with a reward will positively influence the future intention to fund some projects on the CF platform.*

*H4b: A higher level of satisfaction with a reward will positively influence the future intention to fund some projects of the project initiator.*

It has been established in prior research that experience, i.e. the knowledge gained from past behavior, is an important determinant of behavior and will in particular help to shape intentions (Taylor and Todd, 1995). A moderating effect of experience has been found in previous studies (Ajzen, 1987). In the context of CF, the experience will reflect the understanding of how the process of CF works and of the risks that may be involved. We expect a backer's prior experience with funding some projects on the CF platform and their prior experience with funding some projects of the project initiator in particular to moderate the effect of satisfaction on future funding intention. We further expect that the more positive a backer's experiences with prior CF projects are, the more these experiences will strengthen the effect of satisfaction on future intentions to fund. We anticipate to observe this moderating effect with respect to future funding intentions regarding a specific project initiator and with respect to CF projects on a specific CF platform. The former is likely to be observable as we expect backers who have a better understanding of CF and the risks involved to be less likely to hold project initiators responsible for their dissatisfaction. The latter is expectable as backers who are more experienced with CF have a larger pool of experiences (and their related satisfactions) to draw upon when deciding on their future funding intentions. We hypothesize:

*H5a: Positive experiences with funding some projects on a CF platform strengthen the effect of satisfaction with a reward on the future intention to fund some projects of the project initiator.*

*H5b: Positive experiences with funding some projects on a CF platform strengthen the effect of satisfaction with a reward on the future intention to fund some projects on the CF platform.*

Beside prior experience with funding some projects on a CF platform, backers may also have experience with funding some projects of a specific project initiator. It is expectable that this experience will affect the future intention to fund some projects of this specific project initiator. This results from the fact that backers who have developed an understanding of a project initiator's ability and reliability will be less dependent on their satisfaction with a reward. We hypothesize:

*H6: Positive experiences with funding some projects of a specific project initiator strengthen the effect of satisfaction with a reward on the future intention to fund some projects of the project initiator.*

Our research model investigates how expectations and perceived performance ultimately affect future funding intentions, taking into consideration the moderating effects of prior experience. The hypotheses are illustrated in Figure 1.
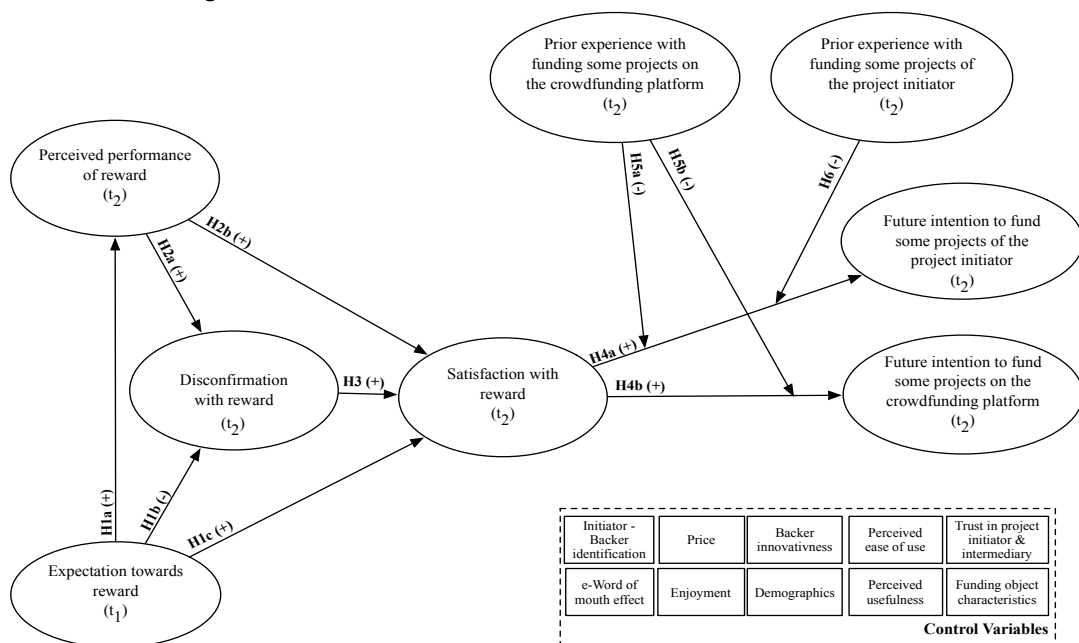


Figure 1.          Research model on EDT in reward-based crowdfunding (own illustration)

## 4  Proposed Methodology

We aim at exploring factors influencing backers' future funding intention by drawing on EDT. In order to do so, we will measure backers' perceived performance of a reward, backers' expectation towards a reward, backers' level of disconfirmation, backers' satisfaction and backers' future funding intention. To obtain the data needed, we will conduct a standardized questionnaire survey, including the variables that we theoretically derived in the prior section. This method helps to collect all relevant data and will allow us to generalize the research findings (Kerlinger, 1973). The constructs utilized in this study will be measured using five-point Likert scales, ranging from "strongly agree" to "strongly disagree", drawn and modified from existing literature. By using a five point scale, we will follow the recommendation of Dawes (2008). In an empirical study he found that items with five or seven levels produce slightly higher mean scores than items with ten levels. Expectations will be measured at a point in time that lies before the reception of a reward ($t_1$), since that will reflect customers' anticipation of a product's or service's performance (Churchill and Surprenant, 1982). In order to thoroughly study backers' expectations of a reward, we will undertake a two-step measurement approach. The

first measurement ($t_1$) will be taken immediately after a CF campaign ends and after backers receive all needed information and therefore have an equal level of information about a reward. This measurement represents the expectations of backers developed after consulting information provided by the project initiator, CF blogs and further media, the updated website of the CF project, and the comments section. The second measurement ($t_2$) will be taken one week after backers receive a reward, so that they have had enough time to gain sufficient experience. It includes the variables of perceived performance, disconfirmation, satisfaction and future funding intention and backers' prior experience with a specific CF platform as well as towards the project initiator.

| Name of variable | Time of measurement | No. of items | Source of scale, adapted from: |
|---|---|---|---|
| Expectation towards reward | $t_1$ | 4 | Lin et al. (2009) |
| Perceived performance of reward | $t_2$ | 8 | Lankton et al. (2014); Khalifa and Liu (2004) |
| Disconfirmation with reward | $t_2$ | 4 | Bhattacherjee and Premkumar (2004) |
| Satisfaction with reward | $t_2$ | 4 | Bhattacherjee and Premkumar (2004) |
| Future intention to fund some projects of the project initiator | $t_2$ | 6 | Venkatesh and Goyal (2010); Jarvenpaa et al. (2000) |
| Future intention to fund some projects on the crowdfunding platform | $t_2$ | 6 | Venkatesh and Goyal (2010); Jarvenpaa et al. (2000) |
| Prior experience with funding projects on the CF platform | $t_2$ | 8 | Lankton et al. (2014); Fang et al. (2014); Gefen and Straub (2004); Ling et al. (2010) |
| Prior experience with funding projects of the project initiator | $t_2$ | 8 | Lankton et al. (2014); Fang et al. (2014); Gefen and Straub (2004); Ling et al. (2010) |

*Table 1.        Scales to measure research variables (own illustration)*

As indicated in table 1, 50 items were formulated to measure the proposed variables. Moreover, we integrated 10 control variables in our model (Figure 1), which will be measured by 41 items derived from the relevant literature. Previous literature in the area of e-commerce recommends integrating control variables as they may affect buyers' intentions to purchase or, in our case, backers' intentions to fund again. Therefore, we have included: perceived usefulness and perceived ease of use (each including 4 items, adapted from Kamis et al. (2008)), trust in project initiator & intermediary (7 items), backer innovativeness (7 items, adapted from Homburg et al. (2009)), initiator-backer identification (5 items, adapted from Homburg et al. (2009)), e-word of mouth effect (3 items, adapted from Park et al. (2011)), project characteristics (classified according to type of funding project and nature of the good), price (1 item), enjoyment (4 items adapted from Koufaris (2002)) and demographics (5 items), The control variable demographics includes the backer's age, gender, nationality, annual household net income and level of education. The control variables will be applied to the constructs disconfirmation with reward, satisfaction with reward and both future funding intention constructs to check if a meaningful relationship among the variables of interest exists. The questionnaire is already structured and has been pre-tested and checked by doctoral degree candidates in order to ensure that the items were properly developed to meet the research objectives. We will measure the dependent and independent variables together within a questionnaire using self-reported and computer-recorded methods (Sharma et al., 2009). Research shows that the validity of the responses can be critical and should be viewed with caution when using these methods (Podsakoff et al., 2003). In recognition of the fact that there is no established methodology for measuring the Common Method Variance (Chin et al., 2012; Liang et al., 2007), we will apply recommended suggestions provided by Podsakoff et al. (2003) to minimize the appearance of this error. Among others, these include assurance of anonymity through the use of pseudonymized codes and a random order of items. In order to collect computer-recorded data, we will ask backers to provide us with their exact backer ID (voluntary indication). Having this backer ID allows us to use a web crawler (where permitted) to automatically scan the backer list to gain information as to whether a backer has pledged or not, at what price and in which category. If using a web crawler is restricted, we will search manually for the backer ID in the publicly accessible list of backers. We will incentivize this by giving participants the chance to enter a competition.

Our source of data is based on the German and the European CF market. These markets are among the largest CF markets in the world (Massolution, 2012). In order to reach a large number of backers, we will focus on the leading reward-based CF platforms. We have chosen these platforms according to the CF platform database "Crowdfundingpr" (Hoskins, 2013) and further based on their funding volume raised in total since their founding. Our data selection will be executed on the platforms Kickstarter, Indiegogo and Startnext, among others. In order to get the above-mentioned questions answered by an appropriate number of backers, we have based our study on various types of sample selection. First, we will partner different reward-based CF projects on selected platforms as a primary data source. Project initiators of running projects will be approached and asked to distribute our questionnaire over their update site and their blog. Second, we will ask website operators, especially blogs related to CF, to distribute our questionnaire through their website. In doing so, we will be able to reach a bigger number of backers. If these backers are involved in a running campaign, we will ask them to specify the project's title and website before proceeding to the survey questions. We have already been able to partner seven planned projects, which will start in the first quarter of 2015. The population of backers and thus the participants of this study can be characterized as early adopters or even innovators, because they adopt innovations earlier than the general population and thus need to be differentiated from the normal population (Rogers, 2003).

In order to analyze the data collected and to test the research model, we will use structural equation modeling (SEM), since it effectively supports analyzing the cause-effect relations between latent constructs (Hair et al., 2011). SEM is a statistical technique incorporating factor analysis (using a measurement model) and path analysis (using a structural model) (Hong et al., 2013). Compared to other statistical techniques, the advantages of SEM include more flexible assumptions and fewer measurement errors. Furthermore, applying partial least square structural equation modeling (PLS-SEM) will help to elaborate the key variables negatively affecting the future funding behavior in reward-based CF (Hair et al., 2011). In addition, PLS sets minimal restrictions on measurement scales, sample size, and residual distributions (Chin et al., 2003). Our model will be tested using SmartPLS 2.0 (Ringle et al., 2005) following the guidelines proposed by Hair et al. (2012).

# 5 Expected Contribution

## 5.1 Contribution to the body of knowledge

For academics, this research contributes to an application of EDT in a new area of interest: reward-based CF. By applying EDT to the context of CF, our research will thus help to develop EDT further. In addition, the use of EDT helps to create a better understanding of considerations underlying backers' funding decisions. More precisely, our research will show how previous funding experiences influence future funding intentions and what role prior experience of a backer with the relatively new concept of CF plays in this context. Further, our study provides a basis for future application regarding other forms of CF and allows for the execution of longitudinal studies in order to discover changes over time (Bhattacherjee and Premkumar, 2004).

## 5.2 Managerial implications

In terms of managerial implications, this research will provide actionable advice for both CF intermediaries and project initiators. Further, we believe that generalizing a theory to apply to various settings can help to solve practical problems in firms (Hong et al., 2013; Lee and Baskerville, 2003). Based on our research, CF intermediaries will be able to formulate and implement guidelines, functionalities and business strategies to help motivate project initiators to create realistic expectations and thus to increase the backers' future funding intentions. Further, CF intermediaries could benefit from familiarizing the crowd with CF in order to ensure that unsatisfying experiences have a reduced influence on future funding intentions. For project initiators, this study will provide guidance on how to communicate characteristics of a reward in order to appropriately and adequately manage backers' expectations.

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