Reward-based Crowdfunding: Reward Characteristics and their influence

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ABSTRACT,
Crowdfunding is a funding method with which an individual or a company can request capital from a large pool of people over the internet. If donors receive a reward in exchange for their financial support we talk about reward-based crowdfunding, which is one of the more prominent systems. Despite the popularity limited research has been conducted on the effect of rewards on the success of projects. This study addresses the issues by reviewing 170 Dutch projects launched on Kickstarter between March 2018 and March 2019. These projects were examined for a connection between the success of projects and reward characteristics. Characteristics include aspects like the type of reward, number of rewards offered, price of rewards, the promised delivery time of a reward and the inclusion of rewards limited by quantity or a timeframe. Projects were grouped into successful and not successful and tested if they differ based on the characteristics. It was found that a project´s success is influenced by the type of reward, number of reward and the inclusion of limited rewards. A connection between the delivery time of rewards, the average price on the success of projects could not be proven. The findings contribute to the understanding of reward-based crowdfunding and can act as guidance for everyone who is interested in acquiring funds via crowdfunding.

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Crowdfunding, Reward-based, Rewards, Kickstarter

1. INTRODUCTION

On April 28, 2009 Kickstarter was launched and the website celebrated its 10 years anniversary by presenting Kickstarter's most remarkable achievements on their website. During these 10 years about 170.000 projects were realised and over 4.570.000.000 US dollar were obtained (Kickstarter Stats. October 2019). This is just one example that crowdfunding has come a long way since the emergence as a funding possibility. Generally, crowdfunding can be defined as an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights (Belleflamme, Lambertz, & Schwienbacher, 2010). Over the time different forms of crowdfunding have been developed. Crowdfunding can be divided into four different models namely the donation model, the lending model, the equity model and the reward model (Bouncken, Komorek, & Kraus, 2015). The reward model, which includes Kickstarter, is characterised by an inclusion of material and immaterial rewards in exchange for financial support (Bouncken et al., 2015) and will be the framework of this paper. In particular, this paper investigates factors of rewards influencing the success of crowdfunding projects. Other general factors have been researched to some extend and criteria for a successful project have been identified. For example, it was found that projects of non-profit organisations are more successful than other projects (Belleflamme et al., 2010). Another research team suggests that informative texts, related pictures or videos and regularly updated project information are the key characteristics for a successfully funded project (Koch & Siering, 2015). Additionally, Mollick (2014) investigated the dynamics of the crowdfunding processes and identified social network size, a project's quality and geographic location as success determinants. However, not sufficient attention is given to the rewards of projects as contributors for success. This is surprising because a lot of research has been based on Kickstarter neglecting the reward as a potential influence. We argue rewards merit special attention because studies based on the reward model of crowdfunding should talk about the aspect that distinguishes by definition reward-based crowdfunding from other crowdfunding forms. Furthermore, a reward is a crucial influence in the motivation of a donor to contribute to a project. Bekkers & Wiepking (2011a) researched charitable giving by reviewing more than 500 articles on this topic to determine which aspects drive charitable giving. They identified costs and benefits as "tangible consequences that are associated with a monetary value "(Bekkers & Wiepking, 2011) and declared cost and benefit as one of the drivers for charitable giving. Reward-based crowdfunding as done by Kickstarter does not have a charitable aspiration however both charitable and non-charitable crowdfunding use rewards to attract donors. Rewards as a tool for motivation outside of a charitable context was investigated by Gerber, Hui, & Kuo, 2012. With the help of semi-structured interviews Gerber et al., 2012 found out that donors are motivated 'to give to get products' and concludes based on the interviews that donors seek rewards. Another facet that shows rewards have a big influence on success of a project is the active creation of rewards. Compared to other circumstances, like location, which affect successfulness the reward can be designed by the project creator. Not only can rewards be created freely but they are also part of the project since the very beginning. Factors like a network around the project or regularly updates of the project develop over time after the initiation whereas a reward can generate awareness already on the first day. The demonstrated importance of rewards is the reason the paper discusses rewards and what kinds of characteristics of rewards have an influence on success. Therefore, the central question of this paper will be:

What kinds of reward characteristics do have an influence on the success of Kickstarter crowdfunding projects?

To answer this research question, we combine insights from previous research on crowdfunding with evidence from e-commerce research and connected disciplines like psychology and marketing. With these insights we look at five specific characteristics namely types of rewards, the number of rewards, prices of rewards, the delivery time of rewards and the inclusion of time or quantity limited rewards. Data from 170 Dutch projects from March 2018 to March 2019 retrieved from Kickstarter were divided into successful and non- successful groups and differences concerning the five mentioned characteristics were tested for statistical significance. Insights from this paper have both theoretical and practical contributions. Theoretically, it contributes to the understanding of rewards and the many different factors that explain a project`s success or failure. Practically, the study will help people who are creating projects to understand the impacts they have by choosing rewards. Furthermore, project initiators can use the paper as a guideline on which aspect of rewards to focus on and create more efficient rewards. This will increase the overall success chance for their projects.

2. LITERATURE REVIEW

2.1 Crowdfunding

Since the origins of crowdfunding and scholar's attention towards that topic years of crowdfunding development have passed. For this reason, crowdfunding has become an umbrella term to cover many different online funding methods. Additionally, crowdfunding is connected closely to comparable practices like crowdsourcing or micro lending. Crowdsourcing, more specified the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call (Howe, 2006b), shares aspects like a network and an open call with crowdfunding. Micro lending describes the idea of funding of individuals, who do not have access to conventional financing from credit institutions (Armendáriz & Morduch 2010). The connection between these two terms and crowdfunding gets apparent in regard to prominent definitions of crowdfunding. One established definition of crowdfunding states that crowdfunding refers to the efforts by entrepreneurial individuals and groups – cultural, social, and for-profit – to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries (Mollick, 2013). Further understanding of crowdfunding is gained by looking at different models of crowdfunding as the donation model, the lending model, the equity model and the reward model. The donation model also referred to as patronage model places funders in the position of philanthropists, who expect no direct return for their donations (Mollick, 2013). An example of the donation model are charity organisations which are funded by supporters. The lending model is one in which funds are offered as a loan, with the expectation of some rate of return on capital invested (Mollick, 2013). The lending model emphasises the

mentioned connection to micro lending again. The equity model treats funders as investors, giving them equity stakes or similar consideration in return for their funding (Mollick, 2013). In fourth model funders receive a reward for backing a project and it is thus called reward model. Rewards can include being credited in a movie, having creative input into a product under development, or being given an opportunity to meet the creators of a project. Alternately, reward-based crowdfunding treats funders as early customers (Mollick, 2013). Next to the terminology and definitions scholars have spent the majority of their efforts to understand the factors that make a crowdsourcing project successful (e.g Cordova, Dolci, & Gianfrate, 2015 ; Koch & Siering 2015). It was discovered that appropriate project descriptions especially information provided in text form as well as images and videos attract attention from potential backers and thereby increase the success of projects (Koch & Siering, 2015). Borst, Moser, & Ferguson, 2018 stress the importance of attracting funders which are not closely connected to the project initiator (e.g. family and friends) and state that successful projects have higher proportions of latent tie funders. Related to this there is evidence that social network ties play an important role in crowdfunding (e.g. Agrawal et al., 2010 and Mollick, 2013). Cordova et al., 2015 related project failure to an increase of funding goal and argued that an increase in project duration will lead to an increase of chances of success.

2.2 Reward-Based Crowdfunding

Rewards are an important aspect of study as they attract backers. This was endorsed by several studies such as Colombo, Franzoni, & Rossi-Lamastra, 2015 who demonstrates the influence of rewards on the success rate of projects and describes the process of designing incentives that attract early backers as critical. Additionally, a study by Gerber et al., 2012 identifies rewards as a motivation for pledging and further states that backers are seeking for rewards. Although the importance of rewards for a project is acknowledged by researchers it appears that the actual rewards were not studied in an appropriate manner (Lin, Lee, & Chang, 2016) explore the effect of reward characteristics on success rates of crowdfunding projects. They found that the number of rewards affects the success rate of projects positively meaning successful projects offer significantly more rewards than unsuccessful (Lin et al., 2016). When the rewards of projects are grouped in three price ranges (low, medium, high) there is no meaningful difference between successful and unsuccessful projects (Lin, et al., 2016). This means successful projects do not have significantly cheaper rewards than unsuccessful projects or the other way around. Another characteristic that contributes to the success of projects is the inclusion of limited offers. Limited offers describe rewards that are limited by either their availability, by quantity or a timeframe meaning the reward is only available for the first 15 backers or a reward that is only available in the first three weeks after the project's initialization. The research has shown that limited offers raise the total amount of founded money in successful as well as unsuccessful projects (Lin, et al., 2016). This effect is higher for successful projects. Lastly it was found that later added rewards (rewards can be added at any time during the pledging) have also a positive effect on the successfulness of projects (Lin, et al., 2016). Despite the numerous findings of Lin, et al., (2016), the research team states that they did not investigate all possible reward characteristics and suggested to investigate the effect of different types of rewards. The study of Lin, et al., (2016) will be the basis of the research on characteristics of rewards and is used to construct the variables in this paper.

2.3 E-Commerce

After we demonstrated the already known influence of rewards on success, we will introduce the perspective of e-commerce to see rewards from a different angle which will further improve the understanding. One very basic definition of e-commerce which can be found in the Cambridge Dictionary is 'the business of buying and selling goods and services on the internet'. These goods are often in form of a product which can be broadly defined as anything that can be offered for use and consumption, in exchange for money or some other form of value (Baines, Fill, & Page, 2013). If we recall the definition of reward-based crowdfunding by Bouncken et al., (2015) the reward model is characterised by an inclusion of material and immaterial rewards in exchange for financial support, the similarities are clear. In both cases money/ financial support is exchanged for a good or service. The closeness of e-commerce and reward-based crowdfunding was further proven in the perception of backers. Gerber et al., (2012) found that backers often refer to the crowdfunding transaction as 'buying' and that they perceive the process as an exchange of value. This opinion is shared with the already mentioned literature review by Bekkers & Wiepking, (2011). Even though the authors are coming from an charitable giving and philanthropy background, the researchers argue that offering access to exclusive services in exchange for contributions brings (charitable) giving closer to buying (Bekkers & Wiepking, 2011). Furthermore, they argue that the benefit of rewards is mostly studied by economist and marketing researchers. Following their example and the mentioned perceptions of Gerber, et al., (2012) we adopt the e-commerce perspective for a better understanding of the influence of reward characteristics on success of projects. We argue that using this perspective is important because the e-commerce context provides us with a much bigger field of potential research than crowdfunding alone. Disciplines like marketing, consumer behaviour or even psychology are often connected to commerce and can be used to derive hypotheses and extend the understandings of rewards.

2.3.1 E-commerce typology

Another implication of the perspective that compares crowdfunding to products of e-commerce is the usage of a typology. There are a lot of different kinds of rewards on Kickstarter and we argue different rewards have different implication for the success. Similar to e-commerce where much research has been undertaken in order to categorize online products e.g. Peterson, Balasubramanian, & Bronnenberg (1997), Lal and Sarvary (1998), Poon and Joseph (2001). All of the mentioned categorizations have in common that they divide products into tangible and intangible. This gains more importance in the context of the research by Hassanein & Head (2004). They investigate the coherence of intangible and tangible products with perceived usefulness and enjoyment of a product and relate these two aspects to the perceived trustworthiness of online vendor. One key finding was that intangible goods were better received than tangible ones in an online environment (Hassanein and Head 2004). Additionally, it was found that trust was significantly higher for websites selling intangible compared to tangible products (Hassanein and Head 2004). These findings raise the question if similar connections can be observed in reward-based crowdfunding processes. Formulated more generally the following hypothesis needs to be addressed by research:

H1: The type of reward has an influence on the success of a project on Kickstarter.

2.3.2 E-Commerce Price

Another important and often researched factor is the price. It is argued that e-commerce benefits price competition and thus lowers prices in general (e.g. Bakos, 2001 ; Shin, 2001).We could not find previous research on reward price competition in

crowdfunding. This is why we look at factors that influence price outside a crowdfunding background but within a commerce context. In the research field of price factors like the fairness of an exchange relationship (Adams, 1965) have been identified early on. Fairness of exchange can be described by the principle of distributive justice, which maintains that people, in an exchange relationship with others, are entitled to receive a reward that is proportional to what they have invested in the relationship (Homans, 1961). In more modern terms, talk about the perceived value (e.g Sweeney & Soutar 2001; McDougall & Levesque 2000) which is the benefit an individual recognizes in an item for sale. In the case of Kickstarter, the perceived value is multifaceted and the price is not the only influence. As the already mentioned paper of Bekkers & Wiepking, 2011a showed, there are several drivers of charitable giving. Kickstarter declared themselves as a public benefit corporation in 2015 (Kickstarter, 2019). This suggests altruistic motives, which means people care about the organization's output, or the consequences of donations for beneficiaries (Bekkers & Wiepking, 2011a) and can be seen as a driver of motivation for support. As an example, one can assume that a purchaser of a product from Amazon does not think about supporting the good cause behind Amazon, whereas a purchaser of an art piece on Kickstarter might want to genuinely support an artist. This differentiates the value perception on Kickstarter compared to other e-commerce websites. Another difference in the context of price in the world of e-commerce can be found in Alba et al. (1997) and is the possibility to compare prices with limited efforts. On Kickstarter most of the rewards are limited to the website of Kickstarter, which means prices cannot be compared. This special position of Kickstarter rewards and the differences to other e-commerce processes arises the question if the price even influences the success assuming fairness of exchange is given and a reasonable pricing.

H2: The price has no influence on the success of projects on Kickstarter.

2.3.3 Marketing

So far it was theorised that the type and the prices of rewards might have an influence on success of a project when considering rewards as a product in an e-commerce context. We posit another potential influence which is a marketing technique used for promotional activities and called scarcity appeal. Scarcity appeal describes a sales promotion scheme that restricts an offer to a limited number of customers, a limited quantity of product, a limited time period, or a specified segment (Soni & Koshy 2016). It is argued that the mentioned effect increases the purchase intention of products (Jung & Kellaris, 2004) and that consumer respond more favourably to quantity scarcity appeal offer when compared with no-scarcity appeal offers. Similar to the described promotion scheme, Kickstarter's reward listening also include limited offerings on rewards. On Kickstarter it is observable that rewards are only available on the first three months after project initiation or a certain reward is only available to the first 50 backers. Both e-commerce and reward-based crowdfunding use the same promotion technique and this paper sets oneself to test if the results of the technique are not only observable in e-commerce but also in reward-based crowdfunding.

H3: Limited offered rewards have an influence on success of projects on Kickstarter.

2.3.4 Consumer behaviour/preference

One widely researched characteristic of customer preference in an e-commerce context is the delivery time of a product. Many studies stress the importance of delivery speed for costumers. Duarte, Costa e Silva, & Ferreira, 2018 identified achieving the intended product with a minimal effort and in a timely fashion as the foremost driver of online shopping. This is further supported by Xu et al. (2017). They found fast delivery which means in the first 24 hours after purchase will lead to a higher satisfaction especially on hedonic goods like toys, food or jewellery. The preference of fast delivery can not only be found in online retail products but also in different reward systems like bonus programs. Research like Yi & Jeon, 2003 and (Minnema, Bijmolt, & Non, 2017) stress the customer preference of instant rewards in contrast to delayed rewards. When applying these insights to Kickstarter two opposing opinions are confronted. On the one hand it is argued that instant rewards are preferred (e.g. Minnema, et al., 2017) on the other hand we argue backers cannot expect fast rewards/delivery from projects needing founding to realise their products which are often connected to the rewards. In the case of Kickstarter, the promised delivery time for potential backers is listed under every reward. The question is if backers on Kickstarter regard delivery time as important as other e-commerce consumers or if most backers do not mind long delivery times. The different explanations for a favourable short delivery time and the rather long delivery times on Kickstarter lead to the following hypothesis which needs to be investigated.

H4: Delivery time has an influence on the success of projects on Kickstarter.

2.3.5 Psychology

Originated in psychology, the term choice overload has gained importance beyond psychological studies. Choice overload suggests that an overabundance of options to choose from may sometimes lead to adverse consequences (Scheibehenne, Greifeneder, & Todd, 2010). Consequences of overabundance include decrease in the motivation to choose, to commit to a choice, or to make any choice at all (Scheibehenne et al., 2010). These effects have also been studied on simple consumer goods like pens or chocolate (e.g. Chernev, 2003 and Shah & Wolford, 2007). However, based on their widespread review Scheibehenne, et., 2010 advise to interpret much choice not always as a bad aspect and suggest preconditions that could lead to the mentioned negative effects. One important condition can be found in Iyengar and Lepper (2000) where it is argued that a lack of familiarity or any prior preferences for a product will reinforce the choice overload effect. In the case of Kickstarter most of the products that need funding are new creation, often backers have no experience using the innovative product. The lack of familiarity and the fact that projects in the dataset have up to 30 rewards endorse the assumptions that projects on Kickstarter are influenced by the number of rewards.

H5: The number of rewards has an influence on the success of a project on Kickstarter.

3. DATASET

Kickstarter is a Benefit Corporation that helps artists, musicians, filmmakers, designers, and other creators set up projects to obtain the resources they need to realise their ideas. Everybody with a creative idea can set up an account on Kickstarter and share the project publicly on the internet. The initiator has to offer rewards as a compensation for financial support from backers. The projects and rewards openly accessible for potential backers and everybody else who might be interested in the project. The URLs of the projects were retrieved from Web Robots (Kickstarter Datasets, 2019). Web Robots offers datasets with general information like URLs, categories, goals and amount pledged on Kickstarter projects. These datasets from historic and current projects can be downloaded freely. The provided datasets were extended by opening the projects in the web and adding the information needed one by one. With this practice 170 projects

which terminated either successful or unsuccessfully have been reviewed. The projects were located in the Netherlands and were categorized on Kickstarter under Comics & Illustration and music. The Netherlands was selected because of the prosperity of crowdfunding in the Netherlands. According to Holland Trade and Invest (2016) the Netherlands is a frontrunner in the crowdfunding industry with a total of 128 million Euros raised and annually doubling the volume of previous years (Holland Trade and Invest, 2016). The category of comics & illustration and music was selected because of the typology explained in the previous chapters. Music and comics are both available digitally and physically (in contrast to the category of crafts for example) and thus suitable for the explained typology.

To answer the research question: 'What kinds of reward characteristics do have an influence on the success of Kickstarter crowdfunding projects?' differences between successful and non-successful projects are measured based on the mentioned characteristics. The successful and non-successful groups are compared and differences tested for statistical significance. If there is no significant difference between the two groups we can conclude that they do not influence the success. As an example, if the variable number of rewards has no significant difference in both groups we will conclude that the number of rewards do not affect the success of a project.

3.1 Typology

The typology consists of projects that offer only tangible rewards, projects that offer only intangible rewards and projects that offer both kinds of rewards. With this categorization 104 successful and 64 not successful projects were compared and tested if there was a statistical significant difference between the two groups based on the tangibility.

3.2 Price of rewards

Every project offers a set of rewards with ascending prices. To measure the price of rewards an average price of all rewards of a certain project is calculated. As all the prices are retrieved from Dutch projects, prices are in Euro. Then the average prices of rewards are compared between successful and unsuccessful projects. The average price of 89 successful and 59 unsuccessful projects was computed and the means compared.

3.3 Inclusion of limited offered rewards

In line with Lin, et al., (2016), we divided projects into two groups. First projects that offer limited rewards and second projects that do not offer limited rewards. Then the difference of the two groups are tested for statistical significance.

3.4 Delivery Time of Rewards

The delivery time measures the time in days between the start of a project and the estimated delivery of a reward. If different rewards have different estimated dates for delivery the average was computed. 101 successful projects were compared with 62 unsuccessful projects.

3.5 Number of rewards

(See Lin, et al., 2016)

Variable five follows the example of Lin, et al., (2016), were the number of rewards for every project was counted. Then the projects were grouped into successful and not successful group and tested for a statistical significant difference between the two groups.

4. RESULTS

4.1 Type of reward

Out of the 104 successful projects 16 only had tangible rewards, 1 had only intangible rewards and 87 had both intangible and tangible rewards. In the no-success group 20 projects had tangible rewards only, 16 had intangible rewards only and 28 had both intangible and tangible rewards.

Pearson's chi square test t=36,49; df =2 ; p<0.05 ; Cramer's V =0,466)

Table 1

Reward typology divided into success and so-success group

1 * STATE Crosstabulation

			STATE		
			Successful	Not Successful	Total
1	tangible	Count	16	20	36
		Expected Count	22,3	13,7	36,0
	intangible	Count	1	16	17
		Expected Count	10,5	6,5	17,0
	both	Count	87	28	115
		Expected Count	71,2	43,8	115,0
Total		Count	104	64	168
		Expected Count	104,0	64,0	168,0

4.2 Price of Rewards

Successful projects have an average reward price of 194,29€, unsuccessful projects an average price of 180,35. The difference in means of the two groups is not statistically significant.

Independent Samples Test t= 0,312; df = 145; p= 0,756

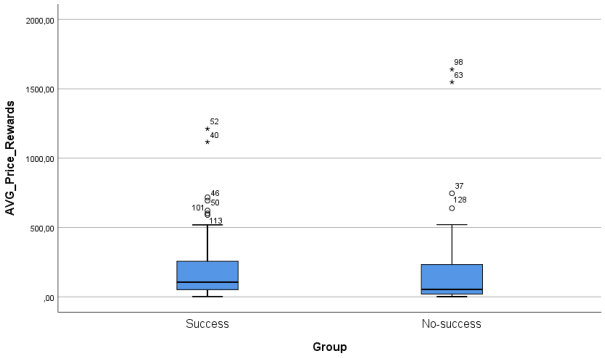

Figure 1 Average price in success and no-success group

4.3 Inclusion of limited offers

Out of the 168 projects 67 successful projects did include limited offers and 37 successful projects did not include limited offers. 24 projects included limited offers but were not successful and 40 projects that did not include limited offers were not successful. Pearson's chi square test t=11,56; df =1 ; p=0.01 ; Cramer's V =0,262

Table 2

Inclusion of limited offers in projects divide by success and no-success group

Limited_offers * State Crosstabulation

			State		
			Successfull	Not Successfull	Total
Limited_offers	Included	Count	67	24	91
		Expected Count	56,3	34,7	91,0
	not included	Count	37	40	77
		Expected Count	47,7	29,3	77,0
Total		Count	104	64	168
		Expected Count	104,0	64,0	168,0

4.4 Delivery time

Successful projects have an average delivery time of 99,07 days and non-successful projects 107,72 days. The difference in means is not statistically significant.

Independent Samples Test t= -0,588; df = 159; p= 0,558

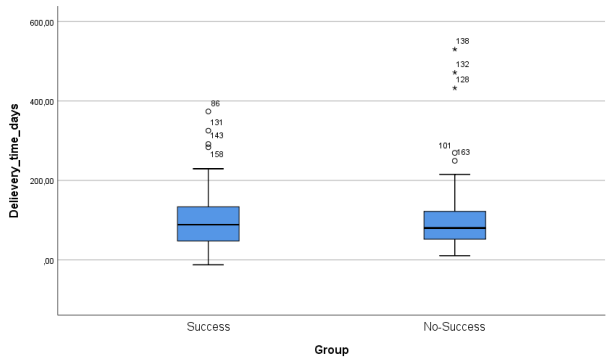

Figure 2 Average delivery time in success and no-success group

4.5 Number of rewards

The successful projects have an average number of rewards of 9,99 whereas not successful projects have an average of 5,59 rewards per project. This difference of means is statically significant.

Independent Samples Test t= 5,272; df = 166; p < 0,001

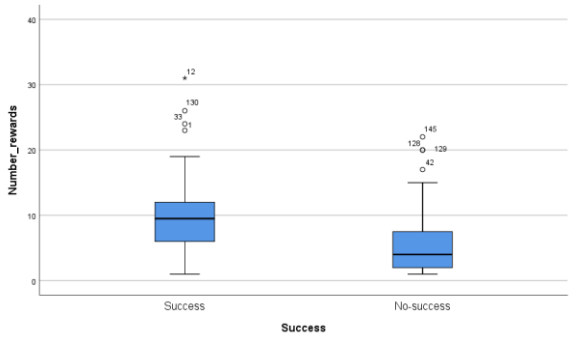

Figure 3 Number of rewards in success a no-success group

5. DISCUSSION

In this paper, we answered the research question of what kinds of reward characteristics do have an influence on the success of Kickstarter crowdfunding projects. Therefore, we used a sample of 170 Dutch projects from March 2018 to March 2019 on the platform Kickstarter. Further, five characteristics were identified and tested for an influence on success of a project. To do this, the projects were grouped into successful and not successful groups and tested for statistical significant differences between the groups. With this practice our five hypotheses could be approved or rejected.

First, we consider the typology of rewards. We found evidence that different reward types influence the success of projects. Especially projects that only offer intangible rewards were more likely to not meet the backing goal. This suggests that backers value tangible rewards more than intangible. With this evidence we are able to accept the first hypothesis.

Second, we look at the price of rewards. We did not find any evidence that the price might influence the success of projects. The different in price of rewards between successful and not successful groups was 8% and not statistically significant. This interpretation has to be understood with caution. When we say no influence, we presume that some kind of fairness of exchange is given and that project initiators are reasonable with their pricing. In the dimensions of the data set with outliers only reaching around 1500€ for a single reward price has no influence on the success. With this knowledge we can accept the second hypothesis. This result is in line with Lin, et al., (2016). The research team grouped prices in a low, medium and high range and found no difference between successful and non-successful projects. In contrast to Lin, et al., 2016 this research used another approach by taking the average price at starting point. Even though the methods were different both researches come to the same conclusion.

Third we discuss the inclusion of limited offers. We found evidence that the inclusion of limited offers can have an influence of the outcome of projects. With this in mind we can accept the third hypothesis that limited offers affect the success of projects. This mean the marketing technique which makes use of the scarcity appeal does not only work in an e-commerce system but also in a crowdfunding framework. With this conclusion we can reinforce the evidence of Lin, et al., (2016). They demonstrated that limited offers increase the total amount of money raised and by that contributes to the success of a project. This study can only conclude that limited rewards have an influence on the success of a project. However, by looking into the data we see that limited offers are more dominant in successful projects which suggest, comparable to the Lin, et al., (2016), that the effect of limited rewards is positive.

Fourth we look at the delivery time of rewards. The data showed no significant difference between successful and non-successful projects. Successful projects have an average delivery time of about 99 days and non-successful projects of 107 days. Not only is the difference only 7.5% but also not significant. This means we have no evidence that there is an influence on delivery time on success and we cannot accept the fourth hypothesis. A possible explanation of this result lies in the understanding of crowdfunding by the backers. Backers understand they are supporting a not finished product and are acceptive for long delivery times that would be unacceptable in an e-commerce context.

Lastly, we focus on the fifth variable which is the number of rewards. We found evidence that the number of rewards does influence the success of projects. Successful projects had an

average of about 10 rewards whereas non-successful projects had an average of 5,6 rewards. This difference of 44% is statistically significant meaning we can confirm the fifth hypothesis. It seems like a high number of rewards does not necessarily affect the success negatively as theorised. This means the assumed effect of choice overload does not play an important role in the system of reward-based crowdfunding. This finding further confirms Lin, et al., (2016) as they came to the same conclusion. We argue that an average number of 10 rewards and a maximum number of 33 rewards is not big enough that a negative effect of choice overload is detectable.

6. CONTRIBUTIONS & LIMITATIONS

6.1 Contributions

The insights from this paper have both practical and theoretical contributions. Three theoretical contributions can be derived from this paper. First this paper can be seen as a reinforcement of previously made research. Three of the five identified reward characteristics are closely related to the study of Lin, et al., (2016) and there is strong alignment between the findings of the shared characteristics. The reinforcement becomes especially meaningful if we consider the different methods that were used to arrive at the previous explained influences of reward characteristics. Second, this paper answers a call for a typology made by the research team of Lin, et al., (2016). There was no previous research that categorizes rewards into a typology to increase the understanding of rewards. This paper not only introduced a general typology but also found evidence that the typology is connected to the success of a project. Next to the typology we contributed to existing research with the introduction of the delivery time as a possible influence of a successful project. To the best of our knowledge this has not been researched before. The third contribution is the demonstrated connection between e-commerce and reward-based crowdfunding. By providing a solid argumentation which allows future research to treat rewards as a product in an e-commerce context opens up a whole new perspective. This perspective can make use of insights from both domains to theorise and explain observations in reward-based crowdfunding.

Practically these insights can be used as a guideline for decision making of project initiators. The project initiator has to create rewards. Which means every discussed characteristic is a decision that has to be made by the project initiator. As an example, the project creator has to choose which types of rewards she/he wants to offer to her/his backers and in this paper, she/he will find a general typology of rewards and evidence that his decisions are of importance. Another practical example of the usefulness of this paper is that this paper provides evidence for the effect of limited offers. With the help of the research initiators know about the possible effect of limited offers and by including them project creators make their project more likely to meet their funding goal.

6.2 Limitations & future research

The research has two different kinds of limitations. First limitations due to the data collection and second limitations due to the research design and the constructions of the variables. Starting with the data collection we have to be critical about the generalizability of the findings. The research was conducted on Dutch projects only and on the website Kickstarter. This means the evidence could only be observable in countries that are somewhat comparable to the Netherlands and on websites that are comparable to Kickstarter. Future research can use the here presented findings and broaden the scope by including more diverse countries and different websites. Moreover, was the research undertaken for the Kickstarter categories comics & illustration and music which means the research can be improved by including all the project categories on Kickstarter.

For the variables there are different limitations and several improvements can be suggested. Starting with the typology we offered a very general approach with the undertaken categorization in this research. Future research can use the typology as a starting point and make it more sophisticated to allow more specific answers. As an example, one could use technical rewards as a part of a typology. Questions whether technical rewards like mobile phone gadgets generate more funding than artistic rewards like paintings are very important. Insights could give an answer which kind of projects are most prominent on Kickstarter and most likely to meet their funding goal. Concerning the characteristic price, number and delivery time of rewards we only found evidence for an influence but no insights on which direction the influence has. Claims like the more rewards the more likely the project is to succeed could not be made. To give an example we argued that the price has no influence as long as the fairness of exchange is given. Future studies could try to investigate on the price perception of rewards and try to find a sweet spot for pricing options of rewards.

7. CONCLUSION

The aim of this study was to explore whether certain characteristics of rewards had an influence on the success of projects. The analysis confirms that the different characteristics have an influence on the success of a project. Type of reward, number of rewards and inclusion of limited offers seem to affect the success of rewards, whereas delivery time and price do not. Rewards are not the only factor influencing success but the active creation and the complexity justify scientific attention in this and future papers.

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