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Preface

This master thesis is the results of research that has been done as part of the MSc in Business

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take the opportunity to thank a couple of people; without them I would not have been able to

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- Mart Evers

Rotterdam, 2012

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held liable for the content.

Executive summary

Recently, a new way of funding arose: crowdfunding. Crowdfunding entails soliciting for a

large number of small amounts of money to an undefined group of people - the crowd.

Despite the popularity of these radically new ways of acquiring funding for virtually any type

of corporate and non-corporate project, little is known about people's donating behavior on

crowdfunding platforms. With crowdfunding becoming more popular as a successful

alternative to traditional funding methods, it becomes crucial to understand the drivers of

crowdfunding success or failure.

Aside from a present as a token of gratitude, donors making donations on

crowdfunding platforms usually do not get anything in return for their donation. This means

they do not acquire venture's ownership, voting rights or profit shares in exchange for their

contribution. Funds raised on crowdsourcing platforms could therefore be regarded as gifts.

Crowdfunding platforms could be seen as intermediaries between donors and

beneficiaries. This intermediary could exploit a plethora of marketing techniques to influence

the behavior of the potential donor. Therefore it is important to look at what influencing

factors are being used on crowdfunding platforms. Bendapudi et al. (1996) developed a

theoretical framework to explain how people's helping behavior towards charities, which can

be regarded as intermediaries as well, can be influenced. Although most crowdfunded projects

are not initiated by charities, the motives to donate and therefore behavior of donors may be

similar.

In order to empirically analyze to what extent the techniques charities use to influence

helping behavior can be applied to crowdfunding, data is used from IndieGoGo

(www.indiegogo.com), one of the biggest and oldest crowdfunding platforms worldwide. A

customized computer script was developed that automatically and systematically scraped data

of every eligible project. This way of data collection has resulted in a usable dataset of

314,724 donations to 8,807 projects in total.

In total 8 success drivers have been identified: image, cause of need, picture appeal,

perspective advocated, social comparisons, decisional control, labeling and request sizes.

Project success is defined as the total raised dollar amount. It is hypothesized that all success

drivers have a positive influence on success, but the effect of the latter 5 success drivers are

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moderated by the motives of the donors. Numerous measures are used to analyze the conceptual model using regression analysis. The effects of goal setting and anchoring were measured by means of the project's funding goal and average donation category amounts. In addition, algorithms were used to determine the sentiment, ease of readability and length of project pitches. The extent to which potential donors were thanked and positively labeled was also estimated. The number of visual cues, like pictures and videos, were incorporated in the model to discover their added value compared to text-only pitches. The effect of social engagement on project success was incorporated in the analysis by looking at the number of comments.

The most important influencers of success are the funding goal and the number of comments. Project success is also directly associated with a short but positive project pitch. When the pitch has a positive sentiment, the reading ease of the text is of less importance. In addition, audiovisual cues definitely support the textual message. Adding a pitch is therefore essential. Also the tactic of labeling can be used: label the potential donor by using positive characteristics in the donation category descriptions. Mention for example that they are generous or kind when they donate. Signaling that small donations are also appreciated is another way to successfully increase the number of donations. This works best however for projects with a relatively small funding goal. Setting up many anchor points is found to be counter effective. Also the moderating effects of people's motives was very weak and not convincing enough to take into account when setting up a crowdfunding project.

Crowdfunding is a very good alternative to traditional fundraising. People that are considering running a crowdfunding project should nevertheless realize that this is not an easy task. In order to be successful, the campaign has to be carefully designed upfront and executed with a lot of dedication. Still generally only relatively small amounts are raised, which makes crowdfunding less attractive for bigger or more mature organizations, if their goal is solely to seek funding.

Crowdfunding platforms in turn should facilitate and guide project initiators in such a way that they can optimize the success drivers in an easy way. Platforms should provide advice on how to write project pitches, make videos and how to configure donation categories. They could also implement algorithms to automatically analyze pitches in terms of word count, sentiment and readability.

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1 Introduction

With the rise of Web 2.0 and the convergence of media (Jenkins 2006) new ventures can be started-up by virtually any person or group, be it as creative startups, entrepreneurial startups, movements for good causes, or other ventures. New ventures face difficulties when it comes to acquiring sufficient funding, especially in the very initial stage of existence. For small ventures without significant assets it is very difficult to get bank loans, and in most cases they seek venture capital – hard to acquire due to high rejection rates. Therefore they are more likely to obtain funds from private individuals (Cosh 2009), which remains a challenge.

Recently, a new way of funding arose: *crowdfunding*¹. Crowdfunding entails soliciting for a large number of small amounts of money to an undefined group of people – the crowd. In the last years crowdfunding platforms were launched in large numbers across the globe; Kickstarter.com being one of the largest ones. In April 2011, Kickstarter.com reported 7,496 successful projects (i.e. the funding goal was reached), which in total raised approximately \$40 million worth of donations (Strickler. 2011).

Despite the popularity of these radically new ways of acquiring funding for virtually any type of corporate and non-corporate project, little is known about people's donating behavior on crowdfunding platforms. With crowdfunding becoming more popular as a successful alternative to traditional funding methods, it becomes crucial to understand the drivers of crowdfunding success or failure.

This research takes an initial step towards filling in this gap. Specifically, (1) it adapts the helping behavior theory to the case of crowdfunding, and (2) empirically tests this framework using rich data from funding projects of a popular online crowdfunding platform. The framework identifies the project characteristics deemed essential to successfully complete a crowdfunding project. We then test these characteristics with real crowdfunding data. Given the massive data collected, we also offer extensive details on their collection procedure, which may serve as a reference for researchers interested in collecting data freely available online.

Our study will contribute to a better understanding of (gift) giving behavior, especially complex in face of new channels that make use of radically new communication tools to

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¹ *Crowdfunding* is part of the overarching concept *crowdsourcing*: outsourcing tasks that were formerly performed in-house by employees to a large unknown group of people in the form of an open call (Howe. 2006).

attract donors, such as users' comments or social media sharing (e.g. through Facebook). In addition, this research will contribute to the debate on whether crowdfunding is suitable as an addition to or substitution of more traditional funding channels. Our results may serve to support managers on their decisions about whether and how to set up a crowdfunding project.

The remainder of this manuscript is organized as follows. In the next section we offer a summary of the theoretical underpinnings of gift giving and helping behavior, which sets the background for our data collection process (section 3) and the development of our conceptual framework (section 4). The empirical analysis is conducted in section 5, where we present our main findings. Section 6 summarizes the main conclusions and offers a set of managerial implications, while pointing to some limitations of the current study that may serve as a starting point for future research.

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2 Background theory

Aside from a present as a token of gratitude, donors making donations on crowdfunding platforms usually do not get anything in return for their donation. This means they do not acquire venture's ownership, voting rights or profit shares in exchange for their contribution. The act of donating on a crowdfunding platform thus cannot be viewed as a pure form of economic exchange where goods are given in exchange for money or other goods (Bagozzi 1975). Funds raised on crowdsourcing platforms could therefore be regarded as gifts.

Gift giving has been researched for a long time in many scientific domains. The vast majority of this research only investigates gift giving in traditional social systems such as families, neighborhoods or churches (Mauss 2002, Malinowski 1978, Sherry Jr 1983, Lowrey et al. 2004). Postmodern consumer gift systems are more geographically dispersed and technologically networked. Gift giving in these social systems is often limited to intangible goods such as files and ideas. It shows however that people nowadays are also willing to help people outside of their immediate social environment. It argues that people now also help people or projects that are more aligned with one's own interests and values (Sherry Jr 1983, Giesler 2006, Skågeby 2010).

These theories are based on peer-to-peer helping, without an intermediary being present. However, crowdfunding platforms could be seen as intermediaries between donors and beneficiaries. This intermediary could exploit a plethora of marketing techniques to influence the behavior of the potential donor. This is only possible to a very small extent in a peer-to-peer situation. Therefore it is important to look at what influencing factors are being used on crowdfunding platforms. Bendapudi et al. (1996) developed a theoretical framework to explain how people's helping behavior towards charities can be influenced. Although most crowdfunded projects are not initiated by charities, the motives to donate and therefore behavior of donors may be similar. Charities act as the intermediary between the donor and the beneficiary. The framework focuses on "people helping the needy through intermediary charitable organizations" (Bendapudi et al. 1996).

Bendapudi et al's (1996) framework identifies multiple categories of drivers that explain helping behavior. These categories are again divided into antecedent drivers and moderating drivers. Antecedent drivers are regarded as the charity controlled factors. That is, the charity organization itself can how they shape these drivers in order to increase the

frequency and volume of helping behavior. Antecedent drivers are categorized in source, message, and request drivers. *Source* drivers comprise the overall image that the charity and the beneficiary convey when they solicit for help. *Message* drivers are elements within the message the potential donor is confronted with, in order to convince him to help. *Request* drivers determine how much help is solicited for. Moderator drivers are characteristics of the potential donor that might alter the effect of the antecedents while soliciting for help (Bendapudi et al. 1996).

Since crowdfunding platforms can be seen as intermediaries comparable to charities, effects explained in Bendapudi et al.'s (1996) framework could also be applicable to donating to crowdfunding projects. This framework will therefore be adapted to the purposes of this research. Specifically, the framework is used to guide which data and variables are important to measure the drivers identified as determining the success of asking for donations.

3 Data

In order to empirically analyze to what extent the techniques charities use to influence helping

behavior can be applied to crowdfunding, data is used from IndieGoGo

(www.indiegogo.com), one of the biggest and oldest crowdfunding platforms worldwide. It

was founded in 2008 and since its inception it has distributed millions of dollars over tens of

thousands of projects (Hockenson. 2012). IndieGoGo offers the possibility to raise funds in a

wide variety of project categories. There are three main categories which in turn are

subdivided in 24 subcategories in total:

• Creative projects: Art, Comic, Dance, Design, Fashion, Film, Gaming, Music,

Photography, Theatre, Transmedia, Video / Web and Writing.

• Good cause projects: Animals, Community, Education, Environment, Health, Politics

and Religion.

• Entrepreneurial projects: Food, Small Business, Sports, Technology

Any person anywhere in the world with a cause for funding can run a crowdfunding

project. The initiator has to provide a minimum of three basic requirements to the

crowdfunding platform: a funding goal (i.e. the amount of money he wishes to raise), the

runtime of the project (i.e. the number of days it is possible for the crowd to donate to the

project), and a project pitch (i.e. a verbal and/or visual appealing description of the project). In

addition, the initiator can set up multiple donation categories and accompanying perks. That

is, when someone donates a certain predetermined amount, he will receive a token of

gratitude – a perk, short for "perquisite" – from the initiator. Perks may vary from a personal

thank you note from the initiator to a customized version of the project's end product. Perks

depend fully on the amount donated and are displayed on the project page.

3.1 Data collection

Data were collected from finished projects still accessible on IndieGoGo at the time of data

gathering (May 2012). A customized computer script was developed that automatically and

systematically scraped data of every eligible project. Data from projects still running at the

time of data collection were discarded, because donations could still be made at that moment.

In addition, projects with a lot of donors could not be recorded. When a project had

approximately more than 1,300 donors, the script crashed and lost this data. 95% of the

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projects in the sample however have 100 donors or less. Therefore it is very unlikely that this shortcoming of the script biases the analysis. This way of data collection has resulted in a usable dataset of 314,724 donations to 8,807 projects in total.

As shown above, IndieGoGo offers a wide variety of project categories and is therefore suitable for practically any type of project. Therefore the sample should be representative for all crowdfunding projects that regard funds as gifts. The sample is also a convenience sample however. On IndieGoGo finished projects, regardless of outcome, stay easily accessible for a long period of time. Also the architecture of the website made that the computer script could easily find all accessible projects and record their data. This resulted in data from projects up to 4 years old.

In the next sections the separate elements of a project are described – project pitch, funders page and gallery page. The specific elements that are used for empirical analysis are elaborated on in detail. A full list of all the exact variables that are used can be found in appendix A. Screenshots of an IndieGoGo project in the way it was shown at the time of data collection can be found in appendix B.

3.1.1 Project pitch

The project pitch page is the first page a potential donor sees when clicking on a project in any category. The page shows the title, description of the project and pitch visual. The pitch visual is either a picture or video (or nothing) of the project. The pitch visual is shown immediately in the center of the screen of the visitor as soon as the page has loaded. Therefore it catches a lot of attention and forms the first impression of the project.

Navigation links are presented to go to the updates page, the comments page, the funders page and the gallery page. These links also show the current number of updates, comments, donors and gallery items. The updates page is a separate page where the project initiators can place updates about the projects during the fund raising period. On the comments page (potential) donors can write short comments to engage with the project initiators and other donors. In addition, social share buttons can be used to share the web address of the project via e-mail or social network sites (e.g. Twitter, Facebook and Google Plus).

The current raised amount, funding goal and time left to donate are prominently

displayed. In addition to the financial information about the project, the project donation

categories and perks are listed. For each category the required amount, name of the perk and a

short description of the perk are shown. Also the number of donors that already have claimed

that particular perk is listed. The project initiators can decide how many, if at all, donation

categories and perks they wish to offer. The amounts of the donation categories are also

decided upon by the project initiators. These are however minimum amounts. Donors can

decide to donate more if they wish.

Lastly, a list of hyperlinks to external pages where the project is featured on is shown.

This could for example be links to a dedicated project website, Twitter account, Facebook

page, YouTube movie and more. Also all the team members that are involved with the project

are shown.

3.1.2 Funders

A separate page is dedicated to the donors that already have contributed to the project. On this

page all the donors that currently have donated money are listed. Donors can choose among a

couple of different ways on how they wish to be listed on this page:

• The full (nick) name of the donor is shown. An avatar and link to their IndieGoGo

profile page will be added if they are registered on the website. It is also possible to

donate without registering. Next to this the donated amount and the claimed perk is

shown.

• The other option is to list the donation fully anonymous. This means that both the

name of the donor and the donated amount are listed as 'Anonymous'.

• In addition to these two extremes, it is possible to only show the name, but list the

amount as anonymous.

3.1.3 Gallery

The gallery is a dedicated page where the project initiators have the possibility to showcase

additional visual material. Pictures as well as videos can be placed here as an addition to the

pitch visual on the project pitch page. It is not possible however to put a textual descriptions

next to the gallery items. Only the number of pictures and videos in the gallery are used for

analysis in this research.

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4 Modeling crowdfunding

In this section the conceptual model of this research will be outlined. The conceptual model is

based on Bendapudi et al.'s (1996) framework of helping behavior. It is argued that this

framework can be applied - however partially - to crowdfunding (cf. section 2). In this

section this framework is therefore adapted. Relevant success drivers for crowdfunding from

Bendapudi et al. (1996) are identified and their effects hypothesized. Parallel to this we

elaborate on how the adopted success drivers are embedded in existing marketing and social

psychology literature. At first, helping behavior and crowdfunding success are defined in

subsection 4.1.

Several terms are used frequently in this section, explained here upfront. The solicitor is

the person or the group of persons that initiated a project on a crowdfunding platform. The

beneficiary is the person or group of persons that receive the raised amount of money after the

project has finished. Since the solicitor and beneficiary are always the same people, these

terms will be used interchangeably, depending on the context. The potential donor is the

person or group of persons that the solicitor reaches out to in order to make him donate to his

crowdfunding project. Helping behavior in terms of crowdfunding is the act of donating any

amount of money to a project. We refer to the complete conceptual model outlined in Figure

1.

4.1 Helping behavior

Helping behavior is the observable act of donating to the solicitor. This happens after the

solicitation is perceived by the potential donor. There are three levels of helping behavior that

can be identified. The potential donor might not want to help at all; in that case the solicitation

had no effect at this point in time. If the potential donor decides to help, this can either be in

the form of token help or serious help. Token help is a modest contribution to either let the

solicitation go away or decrease the personal distress of not helping at all. Serious help is a

substantial contribution to really help the cause to match its needs and achieve its goal.

The degree to which a potential donor complies with the request for help will depend

on a cost-benefit trade off that is made by the potential donor. The benefits may, depending

on one's motive, include achieving self- or social rewards, avoiding self- or social

punishments, avoiding personal distress or enhancing the other's welfare. Costs involved may

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be financial, physical, psychological or social. Also opportunity costs may be involved (Bendapudi et al. 1996).

Potential donors can to date only donate money to crowdfunding projects. This is

inherent to the phenomenon. Donating money directly contributes to reaching the funding

goal that is set at the start of the project. To what extent the funding goal is reached will

determine to what extent the solicitor is capable of executing his project. After the project has

ended, the solicitor can compare the actual money that is raised by the crowd to the goal that

he had set up front. The consequences of helping behavior therefore affect the beneficiary,

because his need gets relieved. In addition they can identify to what extent their efforts where

successful and how they can adapt (Bendapudi et al. 1996).

Different crowdfunding platforms have different procedures however, which affects

the determination of success. On some platforms the solicitor only gets the total raised amount

when the funding goal is reached or exceeded. When the funding goal is not reached at the

end of the fundraising period, all donators get automatically refunded and the solicitor

receives nothing. In such a case, the solicitor can only execute his project when he reaches or

exceeds the funding goal. To determine whether the crowdfunding campaign was a success is

very simple: the raised amount must be the same or higher than the funding goal.

On other platforms the solicitor may keep the raised amount at the end of the

campaign period independently of the funding goal that was set at the beginning. This way,

success becomes more reliant on other factors. It is very likely that the solicitor can (partly)

execute his project when only 80% or 90% of the funding goal is reached. The boundary for

success and failure becomes blurry, but also less relevant. It might hypothetically be possible

to execute a \$1,000 project when only \$850 is raised (a success rate of 85%), but it might be

impossible to execute a project that has only raised \$95,000 where \$100,000 is needed

(success rate of 95%). Therefore it is always important to perceive the success in relative

terms compared to the funding goal and in absolute terms, i.e. the exact amount that is raised.

4.2 Antecedents of helping behavior

The antecedents of helping behavior influence the perception of need, and they influence the

potential donor prior to their actual helping behavior. They make the donor aware of the call

for help and consequently make an attempt to motivate him to donate. These antecedents are

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to a large extent controllable by the solicitor and therefore can be optimized to maximize donations.

4.2.1 Source drivers

The overall *image* of the solicitor influences the perception of need. If the solicitor is able to show that they possess a high level of managerial effectiveness, fundraising efficiency, appropriate levels of campaign intensity and avoidance of political controversy, the perceived image of the solicitor will improve (Harvey 1990). Next to these managerial aspects, the solicitor needs to be perceived as familiar and credible in the eyes of the potential donor, in order for the potential donor to realize that helping is useful (Kelman 1961). When these perceptions are absent or negative, the first step to perception of need is distorted and may result in ignoring or rejecting the solicitor's message and consequently in no helping behavior.

In the case of soliciting for charitable organizations, the charity organization is the source of the message and therefore needs to be perceived as outlined above. In the case of crowdfunding, the source of the message is the solicitor and beneficiary at the same time. Although it is difficult to exactly measure these dimensions of image, there are some proxies to make an estimation of the amount of effort that the solicitor(s) put(s) into his/their project. One can assess the project members, the project description, updates and external platforms used to promote the project. All these items might be influence the image of the solicitor(s).

Although not the source of the solicitation, the crowdfunding platform itself can be compared with the charitable organization, in the sense that it is the intermediary between the solicitor and the potential donor. The crowdfunding platform exists for a longer period of time and can thus build up a reputation. The potential donor will take into account when considering donating to a project whether the platform the project is featured on is reliable. The potential donor could for example think of previous projects that were funded via this particular platform, to what extent the payment of donations where handled securely and whether the platform provides enough opportunities to put projects into the spotlight and convey their message in an effective way.

4.2.2 Message drivers

The perception of need is also influenced by the message the solicitor sends about the cause of need. When the credibility of the message increases, the perception of need will increase

and hence there is a higher probability that helping behavior is rendered. The drivers influencing the credibility of the message are therefore discussed next.

4.2.2.1 Cause of need

First the potential donor will look at the *cause of need*. If the reason for soliciting for help is caused by an external uncontrollable factor the need is perceived to be bigger than when the need is caused by someone's own actions. In such a situation an emphatic response is more likely to occur. Thus people are more inclined to help when the cause of need is external (Griffin et al. 1993).

Most crowdfunding projects however are not 'caused' by external factors, but are the results of the ideas of the solicitor. In most cases they need funding for small to medium scale projects such as movies, music, writing, but also entrepreneurial startups, for which traditional funding is difficult to acquire. Next to these 'ambitious' or 'selfish' projects, funds for charitable causes are also raised on crowdfunding platforms. Usually this is for small charity projects intended for local communities, e.g. to save animals or increase the quality of health care or education. Following theory it could thus be hypothesized that charitable crowdfunding projects are more successful than other non-charitable crowdfunding projects.

4.2.2.2 Picture appeal

Perceived need is not only assessed on characteristics of the sender of the message, also the content of the message itself matters. In most cases the message exists for the largest part of a textual appeal. Adding a picture to the textual message may however increase the perceived need for help. Pictures help people that are less motivated or capable of processing a certain message to comprehend a message more easily (Childers and Houston 1984). Pictures tend to be processed more holistically and integrative in the brain. A more global focus on the features in the picture is the result. This helps people to evaluate objects that are more aesthetic, sensory or symbolic in nature. Such objects are hard to judge by merely adding up utility scores. People are however more inclined to do this with verbal appeals (Holbrook and Moore 1981).

In addition, research has showed that spoken information (e.g. in tv commercials) is processed by a different part in the brain than is written information (Petersen et al. 1989). If both modalities of conveying information – i.e. written and spoken – are used simultaneously, information might interfere as well as integrate with each other. This is caused by the

switching of modality but also matching specific information and creating an organized memory network. Alternating written and spoken information should hence lead to a better processing of item specific information, but less on relating information within the memory (Tavassoli 1998).

On the other hand, providing potential donors with more and more modes of information, may lead to confusion. Due to information overload, i.e. the "finite limits of human beings to assimilate and process information during any given unit of time" (Jacoby 1977), the ability of decision making becomes less accurate and effective (Jacoby 1977). While the potential donor might feel more satisfied with more information, decision making capability will become poorer and perceived risk might increase due to information overload (Jacoby et al. 1974).

Crowdfunding is very well suitable to exploit the benefits of showing visual cues alongside verbal cues. By showing pictures and videos of the project information can be assimilated and processed by the potential donor in multiple ways. Variety in information provision should hence increase the understanding of the need. Despite the fact that research is only being done on cognitively processing written and spoken in cues within a single video, this provides reason to assume that videos might have an additional effect next to written text and static pictures only.

The number of additional cues in terms of pictures and videos need to be focused on as well. Too much information might cause information overload and can potentially turn away a potential donor. Since lots of projects are running at the same time, the potential donor must be able to quickly assess projects. If too many cues are shown within the same project, the potential donor might get confused or unwilling to process and withdraw from donating.

4.2.2.3 Perspective advocated

When it comes to the textual message of the project itself, the *perspective advocated* influences the perceived need. In order to arouse empathic feelings for the beneficiary and hence greater altruistic motives, most solicitations emphasize how the potential donor would feel if they were in the beneficiary's current situation. However, this leads to the potential donor to derogate from the subject and feel less empathy for the beneficiary (Aderman et al. 1974). A more positive effect is generated when the solicitor emphasizes how the beneficiary must be feeling (Aderman and Berkowitz 1970). When a message stimulates people to take

another than one self's perspective, one will show congruent emotional reactions (Davis et al. 1987). Therefore, when someone takes the perspective of a person in need, empathic emotions are aroused and the motivation to help rises (Coke et al. 1978, Dovidio et al. 1990).

Hence the solicitor should not solely focus on a detailed description of his project. The perspective the solicitor chooses in his message should be carefully considered. The project should be more successful when not only an overview of the project itself would be given, but also if this personal perspective of the beneficiary is added. In a broader sense it can be argued that the textual message itself must be drafted carefully. A potential donor must be able to understand it easily and convey a positive sentiment in order to arouse congruent feelings.

4.2.2.4 Social comparisons

Next to informational and emotional appeals to potential donors, other instruments can be used to enhance helping behavior. *Social comparisons* can be used to emphasize that helping is the norm. In such a case, potential donors will most likely comply with the request for help. The knowledge that others have helped creates pressure on a person to do the same. The expression of these acts of helping, however, does not show the reason behind the action. Nevertheless, when one has limited information available, the information signaled from the observed behavior of all previous donors will outweigh one's personal information. Therefore most people are inclined to replicate the actions of the majority of the people. They might even imitate the actions of others, even when their personal information contradicts the correctness of these actions. This is referred to as herding behavior (Banerjee 1992, Zhang and Liu 2011).

Through the process of behavioral learning and herding, potential donors are more inclined to donate when lots of other people did the same before. Therefore presenting a (fictitious) list of donors and donations should result in higher compliance rates and higher donations. The opposite is true as well (Chen et al. 2011). Social comparisons work best when they are provided alongside information about the cause and the positive consequences helping behavior will have. If the social tie with the referent group is close, there is a great interaction effect which has a positive impact on the compliance rate of the request for help (LaTour and Manrai 1989).

The mechanisms of social comparisons can very well be applied to crowdfunding. Potential donors can investigate before they make a donation how many people made a donation already. There is no need to show a fictitious list. Because crowdfunding takes place on the internet, an up to date lists of real donations can be showed at all times. The more donations are made, the more the effect of social comparisons on helping behavior of the potential donor should be apparent. In addition to this, other cues of high donor engagement with the project might have an influence on helping behavior (e.g. number of comments).

4.2.2.5 Decisional control

When a potential donor is given the freedom to choose who, when, what, and how to help, greater helping behavior is the result. Perceived choice is an important type of control. Providing choice increases *decisional control* and ultimately overall perceived control (Hui and Bateson 1991). Most people prefer to choose the course of action by their own, rather than someone else making the choice for them. Dependent on number of choices the person agrees on or can identify, one can experience freedom, but also feelings of conflict or helplessness (Averill 1973).

Wortman (1975) argues that causality and foreknowledge can lead to feelings of choice. The perception that an experience or outcome is caused by one's own decision will positively affect emotion and result in more positive psychological and behavioral outcomes (Hui and Bateson 1991, Wortman 1975).

With choices provided, the potential donor is able to optimize their resource allocation, which should lead to greater helping. The underlying concept of this is strategic altruism: choosing a beneficiary that does not take the help for granted and therefore sees no incentive to behave responsibly (Bruce and Waldman 1990).

How and when to help are restricted at crowdfunding projects; it is only possible to donate money within the runtime of a project. To who and what to donate can be determined by the potential donator however. In every project category there are lots of projects running at the same time. Therefore the more projects there are within the same category, the higher the likelihood that there is more choice for donation at any given time. Hence, projects in categories with a reasonably large number of projects should be more successful. In addition, solicitors can create multiple donation categories for their project. Projects with a large

variety of donation categories should thus increase the perceived choice of potential donors.

These projects should therefore render more helping behavior and be more successful.

4.2.2.6 *Labeling*

Appealing to characteristics of the potential donor may also lead to greater helping behavior.

The solicitor could use *labeling*, i.e. giving labels to potential donors purportedly based on

their behavior to motivate them to behave according to the label. If the labeler is considered as

not manipulative and the potential donor has no immediate counterevidence, the label will be

considered as true. The potential donor will believe that he possesses the characteristics

described by the label. Also the favorability of the solicitor and his message tends to increase.

Overall the inclination to help will be bigger (Moore et al. 1985, Swinyard and Ray 1977).

Thus labeling donors with positive characteristics, e.g. kind, generous or helpful, will result in

greater helping behavior.

In addition, acknowledging and thanking a donor can reinforce desired behavior.

Positive reinforcement is much more effective than negative reinforcement. Thanking is a

form of positive reinforcement which will positively influence the relationship with the

solicitor. Therefore thanking donors is supposed to lead to increased helping behavior (Carey

et al. 1976).

Donation categories of crowdfunding projects can be *labeled* with a name and a

description. This description is often used to describe the perk - the gift in return for the

donation – which the donator can claim when a donation in this particular category is made.

However, when these category names and description contain positive characteristics of

people, such as generosity and kindness, people should be more inclined to help.

Also when these category names and description express that the solicitors are

thankful or grateful, this might positively influence helping behavior. The theory focuses

mainly on repeated donations and the effect of thanking. In terms of crowdfunding, donors

usually only donate once to a specific project. Nevertheless, labeling provides the opportunity

to already express gratitude before the donation is made. Therefore the positive effects of

thanking could also be applicable to potential donors and first time donations.

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4.2.3 Request drivers

Request drivers form cues to the potential donor of what possibilities there are to help. The

solicitor can suggest some of these possibilities, i.e. providing anchor points. Therefore the

solicitor needs to take the request size - the amount of money that is asked for - into

consideration. The potential donor has to have the impression that he can actually help, he

must believe in his self-efficacy. The solicitor can influence this belief by making the request

size reasonably high, so the potential donor believes he is not effortless in reducing the need

for help. In addition, if potential donors believe they do not have the means to help, the

solicitor can adjust the size of the request to emphasize that even a small donation is effective

and appreciated. This is referred to as token help.

When reasonably large request sizes are chosen, the average donation size should

increase. Large request sizes provide anchors against which potential donors can compare

their potential donation to. Assimilation and contrast theory suggest that moderate

contributions seem less generous when they are compared to large anchor points (Sherif et al.

1958). This should consequently result in higher contributions, compared to a situation where

no anchor points are provided (Fraser et al. 1988).

On the other hand, legitimatization of minimal assistance should increase the number

of donations made. If only a small amount is requested, the potential donor is less likely to

argue that he cannot afford to donate. Also the internally rendered contribution size of the

potential donor seems more generous when compared with the low anchor point (Cialdini and

Schroeder 1976). Compared to a situation where no anchor points are provided, allowing

token helping should therefore increase the number of donations without affecting the average

donation amount (Fraser et al. 1988).

Assimilation and contrast theory suggest that when both low and high anchor points

are combined, their impacts are likely to be neutralizing. Compared to the high anchor point, a

small contribution seems insignificant and therefore not helping. Compared to the lower

anchor point a moderate contribution seems generous. In addition, suggesting a low donation

may be perceived as suspect (a potential donor might for instance think: "\$1 would help, but

\$100 is asked for. I can't afford \$100 and the solicitor can't be serious about accepting \$1"

(Fraser et al. 1988)). Fraser et al. (1988) find that using only reasonably high anchor points in

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a solicitation increases the total amount raised significantly compared to a solicitation without

any anchor points (Fraser et al. 1988).

This would suggest that it is wise to include only reasonable high donation categories

in a crowdfunding project. Offering the possibility to also make a token contribution is

supposed to not increase the total amount raised. The theory discusses only stating one anchor

point however. Crowdfunding platforms offer the possibility to list multiple anchor points and

multiple perks. Also the total funding goal of a project is listed. If this is unreasonably high,

people might believe that they are not able to help. These factors might therefore minimize

the hypothesized effect of anchor points on helping behavior.

4.3 Moderators of helping behavior

Moderator variables change the impact of the antecedent variables on the helping behavior of

donors. These moderators are uncontrollable factors for the solicitor. They are divided into

donor and non-donor variables. Donor variables are characteristics of the donor. Non-donor

variables are characteristics of the environment the donor lives in.

4.3.1 Donor moderator - motives

The reason why a potential donor is willing to make a donation can be identified by his

motives. Motives can be put on a continuum ranging from entirely egoistic to entirely

altruistic. A potential donor can thus have a combination of both egoistic and altruistic

motives for their helping behavior (Batson 1987, Baumann et al. 1981). Usually one of the

two motives is more prevalent though (Clary and Orenstein 1991). People who are

dominantly egoistic have the goal to increase their own welfare in the broadest sense. On the

other side, dominantly altruistic people want to increase the other's welfare or relief the

other's need by helping (Batson et al. 1981).

4.3.1.1 Egoistic motives

Egoism can be distinguished by two categories. The first one is gaining rewards for helping or

avoiding punishment for not helping. These rewards and punishments can have intangible

psychological and cognitive outcomes, as well as tangible rewards and punishments. They

may be noticed by one self (pride versus guilt) or by society (praise versus censure) (Batson

1987, Baumann et al. 1981). People behaving in accordance with this category are motivated

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to help by getting recognition, belonging, career promotions, tax advantages, peer pressure or political gains.

The second category of egoism deals with the concern of one's personal distress. When someone encounters a person or situation in need, distress (e.g. sadness) may be experienced. This distress can either be reduced by relieving or ignoring the need. The ultimate goal is to reduce the personal distress, so the motive is still considered as egoistic although it looks altruistic (Griffin et al. 1993, Batson et al. 1981, Batson et al. 1983, Cialdini et al. 1987).

4.3.1.2 Altruistic motives

The goal of dominantly altruistic motivated people is, opposed to egoistic motives, to enhance the welfare of the ones in need, due to feelings of empathy. At the extreme end, even the own welfare may be jeopardized (Dovidio et al. 1990, Krebs 1975). It is possible however to experience multiple motivational states at the same time. If these states are compatible with the situation at hand, probability for helping behavior to occur is very high. If not, there is a tendency to act according to the stronger motive (Batson et al. 1981).

4.3.1.3 Moderating effects of motives

There are some differences in how and why dominantly egoistic and dominantly altruistic people are committing to helping behavior. Egoistically motivated people see helping as a means to an end whereas altruistically motivated people are driven by the actual need of the other. Consequently, altruistically motivated people will either choose to provide serious help or no help at all, dependent on their capabilities to help (Clary and Orenstein 1991). They believe token help does not alleviate the need of the other in a sufficient way. On the other hand egoistically motivated people will opt for token helping more. They will try to reap the benefits of helping (e.g. gaining personal recognition, being perceived as a generous person, etc.) at the lowest possible costs. Hence, in order to attract helping for altruistically motivated people solicitors should emphasize the need, whereas for egoistically motivated people solicitors should allow token helping and provide clear benefits for the donor.

Each motivational state thus moderates different antecedent variables. If someone with a dominant egoistic motive is solicited for helping behavior, he is mostly affected by *labeling*, social comparisons, decisional control (to gain rewards or avoid punishments) and size of request (to reduce personal distress). Someone's helping behavior caused by dominantly

altruistic motives is influenced by the *perspective advocated*. Altruistically motivated people are less sensitive to the other aforementioned factors, but more focused on the need of the beneficiary.

Egoistically motivated people will hence evaluate multiple cues but only make a contribution within the lower donation categories (token help), because this is the best cost/benefits tradeoff for them. They will claim their perk and they will choose to put their name on the public donors list for recognition. Altruistically motivated people will disregard most of the cues and make a serious contribution when the focus of the solicitation is on the need and the feelings of the solicitor. They don't want necessarily something in return, so they won't claim their perk and also only appear anonymously on the public list of donors.

Projects of solicitors that paid attention to *labeling*, *social comparisons*, *decisional control* and *size of request* should attract relatively more egoistically motivated people. Projects of solicitors that mainly paid attention to the *perspective advocated* should attract mainly altruistically motivated people. Consequently, solicitors that carefully configured all antecedent variables should receive donations from donors everywhere on the continuum from totally egoistic motives to totally altruistic motives. Hence, the latter projects should be the most successful since they appeal to the most people.

4.3.2 Non-donor moderators

The extent of helping behavior that is provided also depends on variables that are not related to the potential donor's characteristics. The non-donor variables included in Bendapudi et al.'s (1996) model are *government policies*, *state of the economy, social norms, technological possibilities* and *competing charities*. Given the newness of the phenomenon crowdfunding, no hypotheses can be derived yet about non-donor variables. It can be argued that these variables haven't changed significantly since the rise of crowdfunding. In addition this research focuses on how the solicitor itself can influence helping behavior of individual potential donors. Therefore these variables will not be taken into consideration in the final conceptual model.

All success drivers used in the empirical analysis are placed in the graphical overview outlining the conceptual model, in Figure 1. They are adopted from Bendapudi et al.'s (1996) framework and are assumed to be relevant for crowdfunding projects. The independent variables are antecedent variables: image, cause of need, picture appeal, perspective

advocated, social comparisons, decisional control, labeling and request sizes. The moderating variable influences the effect of the independent variables on the dependent variables, i.e. the motives. The dependent variable measures actual donating behavior, indirectly in the form of a project's success.

Image Cause of need Picture appeal Behavior Perspective advocated Consequences (No help (Raised Token help amount) Serious help) Social comparisons Decisional control Labeling Request sizes Motive (Egoistic Altruistic)

Figure 1: Conceptual model: drivers of crowdfunding success

4.4 Operationalization of success drivers

The nature of this research is exploratory. The challenges in crowdfunding have not yet been

clearly defined. Therefore a large variety of possible success drivers are included in the

conceptual model. This should lead to an indication of what the most important influencers of

success are. To analyze the drivers of crowdfunding success, multiple measures were

constructed to proxy the drivers outlined in the conceptual model. The measures will be

estimated using statistical regression analysis. This provides the opportunity to analyze both

the significance of the conceptual model as a whole and the significance of individual

variables on crowdfunding success (see section 5).

4.5 Measures

To measure the effect of a large part of all success drivers, data directly extracted from the

project pages is used. Other drivers have measures that were calculated after the data

collection process was completed, using the raw data as input. In addition, part of the drivers

can be measured directly whereas other drivers can only be measures by using proxies.

Finally, some drivers are measured using multiple measures. The construction of the

measure(s) for each driver is discussed next.

4.5.1 Crowdfunding success

In order not to create a bias towards projects with a small funding goal, the absolute raised

amount is used as dependent variable in the final model. This makes the regression model

more stable as well (see section 5). When the success ratio - i.e. raised amount divided by

funding goal - would be used, projects with a small funding goal would be marked as

successful more easily. In addition, the analyzed crowdfunding platform in most cases pays

out the raised amount independent of whether or not the funding goal is reached. Hence,

success ratio is less relevant (cf. section 4.1).

4.5.2 Image

The aspects that form the image of the solicitor are difficult to quantify. As a proxy for the

overall credibility of a project the following proxies are used: the number of team members,

number of updates the team has written during the fundraising, number of external

platforms/websites the project is promoted on, the length of the project pitch text and the

funding goal.

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4.5.3 Cause of need

It is hypothesized that projects for good causes are more successful. Therefore the project's main category (creative, good cause, entrepreneurial) is included as independent variable.

4.5.4 Picture appeal

To measure the effect of picture appeal the type of pitch visual, either nothing, a picture or a video, is used. Also the number of pictures and videos on the gallery page are included.

4.5.5 Perspective advocated

It was impossible to determine for every project pitch what perspective was chosen. It would be a very subjective measure and hard to quantify. Instead a sentiment analysis is conducted. Sentiment analysis searches a text for words with positive and negative emotions on document, paragraph and sentence level. These words are scored within a range from -1 to +1. The value is derived from a dictionary of phrases and their according scores. The scores are combined to come to an overall sentiment score for the whole text².

In addition to sentiment analysis it is possible to estimate the easiness of readability and comprehensibility of a text. The Flesch Reading Ease Score calculates the readability of a text based on the number of words per sentence and the number of syllables per word. The higher the score, the easier it is to read the text. A score between 100 and 90 indicates that the text is easily understood by an 11-year-old student. Texts with scores between 0 and 30 are best understood by university students. The formula for the Flesch Reading Ease Score is as follows (Flesch 1948, Flesch 1972):

$$206.835 - 1.015 \ \frac{total\ words}{total\ sentences} - 84.6 \ \frac{total\ syllables}{total\ words}$$

4.5.6 Social comparisons

Social comparisons can be made by looking at the number of donations made and by the number of comments written. These two measures are both indicators of engagement of donors with the project.

² For more information on the used algorithm see: http://www.semantria.com/technology/sentiment-analysis

4.5.7 Decisional control

The category the project falls under is used as a measure of decisional control. The analysis

will cover whether projects in a category with significant more projects than other categories

are indeed more successful. In addition, to measure the donation aspect of decisional control,

the number of donation categories of the project is used.

4.5.8 Labeling

In order to measure the effects of labeling all donation category descriptions need to be

qualitatively assessed. Given the labor intensive nature of this task for this number of projects,

the descriptions are only searched for the presence of certain keywords. These keywords can

never cover all instances of labeling. However, given the exploratory nature of this research

and extensive data set, using this approach might still provide useful insights. Not all cases of

labeling might got indexed, but nevertheless results can be significant for abovementioned

reasons.

To measure the effects of labeling donors with positive characteristics, all donation

category descriptions are searched for these characteristics. A dichotomous variable was

created in order to indicate whether at least one of the keywords was present in at least one of

the donation category descriptions. The keywords that were searched for are: 'generous',

'helpful', 'fan', 'contributor', 'donor', 'donator', 'supporter', 'friend', 'champion' and 'you

are' (in case people are labeled with uncommon words).

To measure the effect of thanking people the same approach was followed. Another

dichotomous variable was created that indicates whether at least one of donation category

descriptions contains keywords referring to thanking or gratitude. The keywords that were

searched for are: 'thank', 'thanks', 'thank you', 'grateful' and 'gratitude'.

4.5.9 Request sizes

To measure the effects of request sizes the average amount of a project's donation category

amounts are used.

Two dichotomous variables were constructed to indicate whether token helping is

signaled. The amount of the lowest donation category was used to determine whether token

helping is signaled. Two variables were constructed, because it is debatable what amount can

still be considered as token helping. One variable uses an absolute cut off of \$10, all

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donations under \$10 can be regarded as token helping. The other variable uses a relative cut off of 1% of the funding goal, so all amounts lower than 1% of the funding goal can be regarded as token helping. This way the cut off is more aligned with the funding goal and hence more realistic.

4.5.10 Motives

To create different indicators for motive, information of each donation to a project is used to calculate average indicators on project level. The measures are created in such a way that they reflect the average level of 'altruisticness' of donations. This is done because it is hypothesized that altruism changes the effect of the majority of the drivers.

The fraction of donors that list their contribution as 'Anonymous' and the fraction of people that list their contributed amount as 'Anonymous' are used. It signals that the donor is not looking for any recognition and therefore acts altruistically. Additionally the fraction of donors that chose to provide serious help, which is regarded as altruistic, is included as moderator. Because this measure is derived from the fraction of donors that only provided token help (1-fraction of token helpers), two measures for fraction of serious help are used: one with a relative and absolute cut off for the token amount (cf. request sizes).

5 Results

The analyzed dataset contains information about 8,807 projects. On average a project raised a sum of \$2,851.83 (σ = 4,228.83), within a range of \$25 to \$84,420. The funding goal however was on average \$10,436.32 (σ = 61,905.73) within a range of \$500 to \$5,000,000. This yielded a success ratio of 67% on average (σ = 57%). 32% of all analyzed projects reached or exceeded their funding goal. The highest success ratio was 1,300%. This project had a goal of \$1,000 but raised \$13,001. On average a project had 36 donors, 5 updates, 21 comments, 3 images, 1 video and 6 donation categories.

Of all projects 29.9% has an image and 67.5% has a video as pitch visual (2.6% has no pitch visual). 67% of all projects expressed gratitude in their donation category descriptions, whereas only 44.8% used labeling of positive personality characteristics in their donation category descriptions. In addition, considered an absolute cut off of \$10, 40.9% of all projects included a donation category with an amount signaling token helping. When a relative cut off of 1% of the funding goal is taken, 93% of all projects signaled token helping.

5.1 Regression model

The theoretical model is of a multiplicative form. In order to perform a linear regression analysis, the model needs to be linearized. The results can be interpreted as elasticities, i.e. the coefficients of the independent variables indicate the percentage that raised amount increases when that specific variable increases with 1%. In order to arrive at this model, continuous variables were ln-transformed by taking the natural logarithm of the original value. It has to be noted that the variable 'number of funders' was not found to be independent from the error term. Therefore it had to be excluded, leaving only 'number of comments' as measure for the success driver 'social comparisons'. The regression equation of the base model is as follows:

```
\begin{split} &\frac{raised\_amount}{funding\_goal} = \exp(\beta_0) \cdot \text{funding\_goal}_i^{\beta I} \cdot \exp(\beta_2 \text{dCategory\_Creative}) \cdot \\ &\exp(\beta_3 \text{dCategory\_Entrepreneurial}) \cdot \text{sentiment}_i^{\beta 4} \cdot \text{flesch\_reading\_ease}_i^{\beta 5} \cdot \\ &\text{description\_word\_count}_i^{\beta 6} \cdot \text{team\_members}_i^{\beta 7} \cdot \text{comments}_i^{\beta 8} \cdot \text{gallery\_image}_i^{\beta 9} \cdot \\ &\text{gallery\_video}_i^{\beta 10} \cdot \text{updates}_i^{\beta 11} \cdot \text{external}_i^{\beta 12} \cdot \exp(\beta_{I3} \text{dPitch\_type\_nothing}) \cdot \\ &\exp(\beta_{I4} \text{dPitch\_type\_video}) \cdot \text{avg\_perk\_amount}_i^{\beta 15} \cdot \text{number\_of\_perks}_i^{\beta 16} \cdot \\ &\exp(\beta_{I7} \text{token\_help\_signalled\_relative}) \cdot \exp(\beta_{I8} \text{thank\_you\_expressed}) \cdot \exp(\beta_{I9} \text{labeling}) \cdot \\ &\exp(\epsilon_i) \end{split}
```

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The regression equation for the linear model is as follows:

In(raised_amount) = β_0 + (β_I -1)ln(funding_goal_i) + β_2 dCategory_Creative + β_3 dCategory_Entrepreneurial + β_4 ln(sentiment_i) + β_5 ln(flesch_reading_ease_i) + β_6 ln(description_word_count_i) + β_7 ln(team_members_i) + β_8 ln(comments_i) + β_9 ln(gallery_image_i) + β_{I0} ln(gallery_video_i) + β_{II} ln(updates_i) + β_{I2} ln(external_i) + β_{I3} dPitch_type_nothing + β_{I4} dPitch_type_video + β_{I5} ln(avg_perk_amount_i) + β_{I6} ln(number_of_perks_i) + β_{I7} token_help_signalled_relative + β_{I8} thank_you_expressed + β_{I9} labeling + ε_i

5.2 Missing data

Not all data was available for all variables. The sentiment score could not be calculated for all projects. The used algorithm was not capable of calculating the score for project text with more than 65,536 characters. The score could only be calculated for 6,210 projects. For the other projects the mean score was imputed in order to not exclude these projects entirely from the dataset. In addition, for projects that don't offer perks the average perk amount could not be calculated. In these cases an extreme low value (0.00000001) was imputed.

The natural logarithm of the value zero cannot be calculated. All zero values were replaced by a very low value: 0.00000001. This should not bias the interpretation, and make it possible to keep all projects in the dataset. Also negative values could not be ln-transformed. This concerns the variables 'sentiment' and 'flesch_reading_ease'. The constant 1 is added up to every sentiment score. The constant 150 is added up to all Flesch Reading Ease scores. No values are now negative and all observations can be used in the analysis. The interpretation of the coefficients does not change because the same value is added to every observation.

5.3 Multicollinearity

The dataset suffers from severe multicollinearity problems. This distorts the results significantly and conclusions drawn from these results are therefore unreliable. To alleviate multicollinearity, the variables 'sentiment' and 'flesch_reading_ease' are mean-centered (substract the mean value of a variable of each individual value) in the base model. Mean-centered variables are indicated with the prefix 'MC' in table 1. In addition, to alleviate multicollinearity between the variables 'number of perks' and 'average perk amount', the variable 'average perk amount' was standardized – i.e. every value was divided by its

corresponding standard deviation. This was sufficient to arrive at a stable model. All variance inflation factor scores are below 2.6 for all variables in the base model.

5.4 Results base model

The base model includes all variables measuring the drivers for crowdfunding success as outlined in the conceptual model, except for moderators. The base model is kept relatively small in order to identify the most important effects. Later on the model will be expanded with moderators (see section 5.5). The details of the base model and coefficients can be found in table 1.

All the variables combined have a significant influence on the success of crowdfunding projects (F = 142.649; $p = \frac{\text{Dependent variable: LN_raised_amount}}{\text{Dependent variable: LN_raised_amount}}$ 0.000). The explanation power of the total model is rather low ($R^2 = 0.236$; Adjusted

Table 1: Coefficients of base model

	В	t
(Constant)	5.201 (a)	57.726
dCategory_Creative	.057 (b)	2.414
dCategory_Entrepreneurial	087 (b)	-2.100
LN_MC_sentiment	.159 (a)	2.845
LN_MC_flesch_reading_ease	403 (a)	-3.159
LN_description_word_count	015 (c)	-1.644
LN_funding_goal	.250 (a)	30.110
LN_team_members	.101 (a)	8.067
LN_gallery_image	.003 (a)	2.816
LN_gallery_video	.002 (b)	2.287
LN_updates	.006 (a)	5.542
LN_comments	.064 (a)	25.797
LN_external	.001	1.443
dPitch_type_nothing	083	-1.529
dPitch_type_video	.043 (b)	2.134
LN_number_of_perks	005 (b)	-2.050
LN_avg_perk_amount_standardized	004	-1.203
token_helping_signalled_relative	.082 (b)	2.266
thank_you_expressed	.014	.675
labeling	.044 (b)	2.487
F	142.649 (a)	
df	8,806	
\mathbb{R}^2	.236	
Adjusted R ²	.234	

(a): significant at 1% level

(b): significant at 5% level

(c): significant at 10% level

 $R^2 = 0.234$). The goal of this research is however to get an understanding of which variables related to crowdfunding platforms can explain crowdfunding success, not so much creating a model that can accurately predict success. Most likely endogenous factors that cannot directly be measured on crowdfunding platforms play an important role as well (see suggestions for further research in section 6.3).

5.4.1 Image

In order to judge the credibility of a project the funding goal, three out of four variables are of importance: funding goal, updates and external platforms. Funding goal is the most influential variable in the model (t = -90.506; p = 0.000). It indicates that projects with lower goals have generally raised more money in absolute terms. People are most likely inclined to

donate to projects with realistic funding goals. The number of updates (t = 5.542; p = 0.000) and the number of team members (t = 8.067; p = 0.000) have a positive significant effect on project success as well. The number of external platforms the project is featured on has no significant impact (t = 1.443; p = 0.126).

Next to the importance of funding goal, it becomes apparent that the image of the project is mainly formed by the team composition and their activity. Multiple team members seem to convey more credibility and trust. The same can be concluded for numbers of updates. It indicates that the project initiators are serious about their project and are doing everything in their power to succeed. The insignificant effect of external platforms indicate that potential donor mainly judge the project on the crowdfunding platform itself and don't heavily seek additional information on other websites to form their image of the project.

5.4.2 Cause of need

Analysis shows that creative projects are significantly more successful than projects for good causes (t = 2.414; p = 0.016). Entrepreneurial projects are however significantly less successful than projects for good causes (t = -2.100; p = 0.036). Hence, it cannot be said that projects for good causes are always more successful. It might be the case that, unlike for charity, there are different drivers that make people care about a project, for example innovativeness or creativeness of the project. It indicates that people that 'caused' their own need - i.e. came up with a good idea - actually get more funds. This is an important difference with charity projects to keep in mind when raising funds via crowdfunding.

5.4.3 Picture appeal

Showing either no pitch visual or an image as pitch visual does not significantly matter in terms of success (t = -1.529; p = 0.126). Showing a pitch video instead of an image is however significantly associated with higher project success (t = 2.134; p = 0.033). This indicates that it is better to include a pitch video instead of an image. Different information may indeed be conveyed via videos which is processed differently in the brain.

The number of pictures in the gallery has a positive significant influence on success (t = 2.816; p = 0.005). More pictures of the project might thus give additional information that can convince the potential donor to donate. The number of videos also has a positive significant influence on success (t = 2.287; p = 0.022). The effects are marginal, but it supports the findings of the pitch visuals that information conveyed via multiple modalities

indeed appeals to more people, since everyone processes information differently. A good balance between textual and audiovisual information is therefore of importance. Since the effects are not very big, too many additional pictures and videos might still cause information overload.

5.4.4 Perspective advocated

All measures that are the proxy for easiness of comprehending the textual project description have a (moderate) significant influence on the success of a project. The effect of sentiment is significant and positive (t = 2.845; p = 0.004). Successful projects thus have a project description with a high positive sentiment level. The Flesch Reading Ease score also has a significant effect on success. However, it seems to be that harder to read project descriptions are associated with higher success (t = -3.159; t = 0.002). The word count has a negative moderately significant effect on success (t = -1.644; p = 0.100), i.e. projects with a short description are generally more successful. This is a clear indication that the textual project description plays an important role in crowdfunding success. It is more intuitive to assume that an easier to read text yields more donations, but apparently this is not the case. A harder to read text might indicate that the project initiators are knowledgeable about their subject.

The model was tested with five alternative operationalizations of reading ease: Flesch Kincaid Grade Level, Gunning Fog Score, Coleman Liau Index, SMOG Index and Automated Readability Index. All measures showed the same effect as the Flesch Reading Ease score, but two measures failed to reach statistical significance at the standard levels (with p-values of 0.374 and 0.180). Overall it can be concluded that the reported effect of reading ease is robust.

5.4.5 Social comparisons

The number of comments has a significant effect on the success of projects (t = 25.797; p = 0.000). Since only one proxy is used, it is still questionable whether social comparisons indeed are of great influence. The number of comments could for example also be high because people naturally tend to engage more when projects become more successful. Therefore this finding is not necessarily a proof of the effect of social comparisons. More precise measures would be needed to further research this success driver. It does nevertheless show that high engagement of funders is associated with successful projects. Next to funding goal, this is one of the most influential variables.

5.4.6 Decisional control

The majority of projects are placed in the 'Creative' category (Creative: 76.2%; Good causes:

18.3%; Entrepreneurial: 5.5%). These projects are significantly more successful than projects

in the category 'Good causes' (t = 2.414; p = 0.016). Projects in the category

'Entrepreneurial' are significantly less successful than projects in the category 'Good causes'

(t = -2.100; p = 0.016). Hence, creative projects are also more successful than entrepreneurial

projects. This is an indication that projects in popular categories are indeed more successful.

Drawing conclusions from these result needs to be done reservedly. Other factors than

only the number of projects in a certain category might be of more influence on the amount of

money raised. More research into specific subcategories would be needed in order to

determine to what extent decisional control plays an important role.

Looking at the project level, it becomes clear that the number of perks has negative

significant influence on success (t = -2.050; p = 0.040). Projects that raise the most money

only have a couple of anchor points and perks. Providing decisional control on project level

might thus benefit only to a certain extent. Providing too much guidance and choice might

confuse a potential donor and make him indecisive. This could scare him away from making a

donation.

5.4.7 Labeling

The effect of labeling is significant and has a positive influence on project success (t = 2.487; p =

0.013). Despite the operationalization of this measure being very rough, this finding gives a first

indication that positively labeling potential donors also works for crowdfunding projects. It also gives

an indication that the perk description is a justified place to put these labels. Potential donors seem to

pay attention to these and are more inclined to donate when they are positively labeled.

The effect of thanking of donors is however insignificant (t = 0.675; p = 0.500). This

is an indication that thanking potential donors or expressing gratitude before they actually

donate does not raise more money. It could also be the case that using the perk descriptions

for thanking is not the right method. Another place, e.g. the project description, might yield

better results.

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5.4.8 Request sizes

The average amount of a project's donation categories does not have a significant effect on

success (t = -1.203; p = 0.229). This indicates that the amounts of the perks do not serve as

anchor points. This means that they can better reflect the monetary value of the actual perk.

Signaling token helping does have a positive effect on success however (t = 2.266; p =

0.023). Because the relative measure was used in the base model (i.e. showing a donation

category with an amount lower than 1% of the funding goal is considered as signaling token

help) this conclusion is only valid when the actual anchor point of the token amount is set in

relation to the funding goal.

Looking at the alternative measure with absolute cut off (an amount lower than \$10 is

considered as token help), there is a no significant effect (t = 1.466; p = 0.143). Signaling

token helping should thus always be done with the funding goal in mind. The funding goal

should not be disproportionately high to the signaled amount of token help (e.g. showing a

lowest anchor point of \$5 at a project with a \$500 goal is considered to have greater influence

on success than showing a lowest anchor point of \$5 at a project with a \$50,000 goal).

Contrary to theory it can hence be concluded that anchor points in itself do not contribute

to project success. Signaling that small donations are appreciated is however good when the

lowest amount is set in relation to the funding goal. Signaling token helping thus only benefits

projects with relatively small funding goals.

5.5 Moderators

To analyze whether motives of donors alter the effects of the variables in the base model, the

model is extended with moderators. The measures for motive as outlined in section 4.5.10

need to be combined in order to avoid multicollinearity. The average score of all three

measures for motive was therefore calculated and resulted in the new variable 'fraction

motive altruistic'. This variable was also mean centered to avoid multicollinearity. It shows

the fraction of a project's donors of a certain project that supposedly had dominantly altruistic

motives to donate. This variable has a significant influence on success (t = 4.701; p = 0.000).

This variable as a moderator is hence justified. To keep the model stable, only variables were

analyzed that were deemed most influential and still had a significant effect on success when

the moderator was entered into the model: sentiment, Flesch Reading Ease score (Perspective

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advocated), number of comments (Social comparisons) and labeling (Labeling) (see table 2). The base regression model is extended as follows:

```
\frac{raised\_amount}{funding\_goal} = \exp(\beta_0) \cdot \text{funding\_goal}_{i}^{\beta_1} \cdot \exp(\beta_2 \text{dCategory\_Creative}) \cdot \\ \exp(\beta_3 \text{dCategory\_Entrepreneurial}) \cdot \text{sentiment}_{i}^{\beta_4} \cdot \text{flesch\_reading\_ease}_{i}^{\beta_5} \cdot \\ \text{description\_word\_count}_{i}^{\beta_6} \cdot \text{team\_members}_{i}^{\beta_7} \cdot \text{comments}_{i}^{\beta_8} \cdot \text{gallery\_image}_{i}^{\beta_9} \cdot \\ \text{gallery\_video}_{i}^{\beta_{10}} \cdot \text{updates}_{i}^{\beta_{11}} \cdot \text{external}_{i}^{\beta_{12}} \cdot \exp(\beta_{13} \text{dPitch\_type\_nothing}) \cdot \\ \exp(\beta_{14} \text{dPitch\_type\_video}) \cdot \text{avg\_perk\_amount}_{i}^{\beta_{15}} \cdot \text{number\_of\_perks}_{i}^{\beta_{16}} \cdot \\ \exp(\beta_{17} \text{token\_help\_signalled\_relative}) \cdot \exp(\beta_{18} \text{thank\_you\_expressed}) \cdot \exp(\beta_{19} \text{labeling}) \\ \cdot \text{fraction\_motive\_altruistic}_{i}^{\beta_{20}} \cdot \exp(\beta_{21} \text{sentimen}_{i}^{*} \text{fraction\_donation\_altruistic}_{i}) \cdot \\ \exp(\beta_{23} \text{comments}_{i}^{*} \text{fraction\_motive\_altruistic}_{i}) \cdot \\ \exp(\beta_{23} \text{comments}_{i}^{*} \text{fraction\_motive\_altruistic}_{i}) \cdot \\ \exp(\beta_{24} \text{average\_perk\_amount}_{i}^{*} \text{fraction\_motive\_altruistic}_{i}) \cdot \\ \exp(\beta_{25} \text{token\_helping\_signalled\_relative}_{i}^{*} \text{fraction\_motive\_altruistic}_{i}) \cdot \exp(\varepsilon_{i}) \\ \end{aligned}
```

When this model is ln-transformed the linear regression equation becomes:

```
\begin{split} &\ln(\text{raised\_amount}) = \beta_0 + (\beta_{I}\text{-}1)\ln(\text{funding\_goal}_i) + \beta_2\text{dCategory\_Creative} + \\ &\beta_3\text{dCategory\_Entrepreneurial} + \beta_4\text{ln}(\text{sentiment}_i) + \beta_5\text{ln}(\text{flesch\_reading\_ease}_i) + \\ &\beta_6\text{ln}(\text{description\_word\_count}_i) + \beta_7\text{ln}(\text{team\_members}_i) + \beta_8\text{ln}(\text{comments}_i) + \\ &\beta_9\text{ln}(\text{gallery\_image}_i) + \beta_{I0}\text{ln}(\text{gallery\_video}_i) + \beta_{II}\text{ln}(\text{updates}_i) + \beta_{I2}\text{ln}(\text{external}_i) + \\ &\beta_{I3}\text{dPitch\_type\_nothing} + \beta_{I4}\text{dPitch\_type\_video} + \beta_{I5}\text{ln}(\text{avg\_perk\_amount}_i) + \\ &\beta_{I6}\text{ln}(\text{number\_of\_perks}_i) + \beta_{I7}\text{token\_help\_signalled\_relative} + \beta_{I8}\text{thank\_you\_expressed} + \\ &\beta_{I9}\text{labeling} \end{split}
```

```
+\beta_{2d} ln(fraction\_motive\_altruistic_i) + \beta_{21} ln(sentiment_i)*ln(fraction\_donation\_altruistic_i) + \\ \beta_{22} ln(flesch\_reading\_ease_i)*ln(fraction\_motive\_altruistic_i) + \\ \beta_{23} comments_i*ln(fraction\_motive\_altruistic_i) + \\ \beta_{24} ln(labeling_i)*ln(fraction\_motive\_altruistic_i) + \\ \epsilon_i
```

Overall this model has a significant influence on crowdfunding success (F = 116.799; p = 0.000). The explanation power of the model increases as well, but not significantly

compared to the base model ($R^2 = 0.242$; Adjusted $R^2 = 0.240$). All coefficients of this model can be found in table 2.

It has to be noted that the variable 'number of perks' no longer has a significant influence on success in this model (t = -1.088; p = 0.276). Therefore it is not analyzed whether this variable is moderated by motive. The implications of the effect of this variable drawn earlier also have to be interpreted cautiously. This is yet another indication that anchor points don't play an important role in crowdfunding success.

5.5.1 Results of moderators

Only the effect of comments is significantly moderated by donor's motive to donate (t = -6.837; p = 0.000). Projects with more altruistic donors have significantly fewer comments. This is an indication that altruistic people indeed purely focus on alleviating the need of the solicitor. He might be less interested in voicing his opinion or read those of others. Thus, when a potential donor has a dominantly altruistic motive for donating, he will be significantly less influenced by the number of comments that are made. This is an indication that dominantly altruistically motivated people are less prone to social comparisons effects, compared to dominantly egoistic motivated people.

Sentiment (t = -0.528; p = 0.597) and reading ease (t = -0.883; p = 0.377) are not significantly moderated by motive. Their impact should however increase when people are more altruistic. In general dominantly egoistic or altruistic people are not influenced differently by the project pitch text. The same is true for labeling. Dominantly egoistically people should be more influenced by the effects of labeling compared to dominantly altruistically motivated people, but this is not the case (t = -0.716; p = 0.474).

Overall it can be concluded that there is only a very small indication that people's altruistic or egoistic motives change the effects of crowdfunding success drivers on their helping behavior. Compared to donating to charities people might have very different motives to donate, which might be difficult to plot on a scale ranging from completely altruistic to completely egoistic. People might also have other reasons to claim a perk and put their name on the funders page. More research into this behavior would be needed in order to refine the meaning of these expressions.

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Table 2: Coefficients of model with moderators

	В	t	В	t
(Constant)	5.064 (a)	53.565	5.079 (a)	53.814
dCategory_Creative	.073 (a)	3.068	.067 (a)	2.837
dCategory_Entrepreneurial	070 (c)	-1.685	080 (c)	-1.944
LN_MC_sentiment	.159 (a)	2.856	.151 (a)	2.707
LN_MC_flesch_reading_ease	383 (a)	-3.006	387 (a)	-3.013
LN_description_word_count	016 (c)	-1.736	017 (c)	-1.797
LN_funding_goal	.263 (a)	30.094	.259 (a)	29.631
LN_team_members	.101 (a)	8.138	.102 (a)	8.225
LN_gallery_image	.003 (a)	2.790	.003 (a)	2.755
LN_gallery_video	.003 (b)	2.485	.002 (b)	2.211
LN_updates	.006 (a)	5.723	.006 (a)	5.649
LN_comments	.065 (a)	26.122	.069 (a)	27.052
LN_external	.001	1.517	.002	1.616
dPitch_type_nothing	083	-1.530	077	-1.429
dPitch_type_video	.046 (b)	2.316	.046 (b)	2.300
LN_number_of_perks	003	-1.142	003	-1.088
LN_avg_perk_amount_standardized	005	-1.473	005	-1.470
token_helping_signalled_relative	.098 (a)	2.693	.104 (a)	2.859
thank_you_expressed	.018	.873	.021	1.013
labeling	.048 (a)	2.702	.046 (a)	2.606
LN_MC_fraction_motive_altruistic	.134 (a)	4.701	.239 (a)	5.933
LN_MC_sentiment.LN_MC_fraction_motive_altruistic			074	528
$LN_MC_flesch_reading_ease.LN_MC_fraction_motive_altruisticness and the property of the prope$	2		332	883
$LN_comments. LN_MC_fraction_motive_altruistic$			044 (a)	-6.837
labeling.LN_MC_fraction_motive_altruistic			036	716
F	136.946 (a)		116.799 (a)	
df	8,806		8,806	
R^2	.238		.242	
Adjusted R ²	.236		.240	

Dependent variable: LN_raised_amount

(a): significant at 1% level

(b): significant at 5% level

(c): significant at 10% level

6 Conclusion

While acquiring traditional funding, such as bank loans or venture capital, for innovative new

ventures becomes increasingly harder, crowdfunding is gaining in popularity. This alternative

method of fundraising solicits to an unknown large group of people - the crowd - for many

relative small donations that together form a budget high enough to execute one's project.

Crowdfunding is becoming a popular method for particularly projects in the creative

industries, for good causes and entrepreneurial startups. For these kinds of projects donors do

usually not receive ownership or profit shares in return for their donation. Therefore donations

to these crowdfunding projects can be regarded as gifts.

As crowdfunding is used more and more, it becomes valuable to know what important

drivers of success are. By adapting Bendapudi et al's (1996) framework for enhancing helping

behavior towards charitable organizations, the most important marketing techniques to

maximize donations to crowdfunding projects are identified in this research. Three different

aspects of a crowdfunding project are analyzed: the overall image of the source (the project

itself and its initiators), the message (the project pitch) and the request for help (the

solicitation for funds). Also the motive of donors for donating is taken into account.

8,807 projects on crowdfunding platform IndieGoGo have been analyzed. 8 different

success drivers are measured by data of multiple variables extracted from finished

crowdfunding projects. Also the sentiment and readability ease of each project pitch text is

calculated and used in this analysis.

The funding goal is the heaviest influencer of crowdfunding success. It can be

intuitively understood that funding goal highly correlates with the actual amount raised. It

therefore shows that the model is in fact robust. The number of comments, which is an

indication of social influence and engagement, is the second largest influencer of success. It

should come as no surprise that creating engagement with donors is essential in bringing a

crowdfunding project to a successful end.

What is more interesting to see is that project success is directly associated with a

short but positive project pitch. When the pitch has a positive sentiment, the reading ease of

the text is of less importance. In addition, audiovisual cues definitely support the textual

message. Adding a pitch video next to the pitch text conveys the pitch in a different modality.

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This seems to be the optimal way of communicating the project pitch on the crowdfunding

platform. Projects with a picture as pitch visual or no pitch visual all were significantly less

successful.

Credibility of projects generally increases when there is a team of multiple project

initiators. It is important that they publish updates during the fundraising period in order to

sustain this credibility. To persuade potential donors, the tactic of labeling can be used: label

the potential donor by using positive characteristics in the perk descriptions. Mention for

example that they are generous or kind when they donate. Signaling token help is another way

to increase the number of donations. It shows that small donations also are appreciated. This

works best for projects with a relatively small funding goal. Setting up many anchor points

however is found to be counter effective.

Motives of potential donors, on a continuum of dominantly egoistic to dominantly

altruistic, only very moderately moderates the effects of significant success drivers. Results

show not enough evidence to be able to conclude that people's altruistic or egoistic motive

play a very important part in crowdfunding success.

From a theoretical perspective it can be concluded that indeed a majority of the effects

of antecedent success drivers as outlined in Bendapudi et al's (1996) framework also hold for

crowdfunding projects. The most important success drivers are 'Perspective advocated',

'Picture appeal' and 'Image'.

6.1 Managerial implications

Crowdfunding is a very good alternative to traditional fundraising. People that are considering

running a crowdfunding campaign should nevertheless realize that this is not an easy task. In

order to be successful, the campaign has to be carefully designed upfront and executed with a

lot of dedication. Still generally only relatively small amounts are raised, which makes

crowdfunding less attractive for bigger or more mature organizations, if their goal is solely to

seek funding. In addition, traditional funding methods often provide access to other benefits

next to funds, such as advice from experts or access to a business network. This is less likely

to happen when crowdfunding is used and could be a disadvantage.

Crowdfunding is particularly suited for entrepreneurial projects that are in the very

first phase of their existence. Crowdfunded projects on average manage to raise \$2,500 to

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\$3,500, which can provide a starting point to prove their viability. If ventures are getting more successful over time, more traditional funding, such as venture capital, would nevertheless still be needed to transform a small scale project into a mature business.

If crowdfunding is chosen as fundraising method, marketing techniques that can be exploited on crowdfunding platforms can very well help to influence the willingness to donate. This should consequently increase a project's raised amount above average, even if the project does not especially stand out. Most attention needs to be paid to the project pitch. The textual description should be short and convey a positive message. On average a project description has 577 words. Next to this, creating a pitch video and several additional images and videos for the gallery are important to convey a credible message. Lastly, the funding goal and donation categories have to be chosen carefully. It is seen that the funding goal in most cases lies slightly higher than the amount that is actually raised. Therefore, in order to reach the average amount between \$2,500-\$3,500, setting a funding goal of e.g. \$4,000-\$4,500 would be optimal. Signaling token helping is also advised if the funding goal is within this range. Labeling potential donors with positive characteristics in the perk description is an easy way of psychologically influence potential donors and should not be forgotten.

Of course there is no ideal or average crowdfunding project. The drivers for crowdfunding success should always be configured in such a way that they support the actual content of the project. Nevertheless, this research points out what project initiators can expect when they start a crowdfunding project that does not particularly stand out. There are projects that were very successful in raising funds and exceeded their funding goal up to 10 times. There are however lots of projects started every day. To stand out, one's project needs to be really innovative, unique or amiable. Other marketing techniques, e.g. viral marketing, can only flourish when projects have such characteristics. Only in those cases crowdfunding has the potential to raise an enormous amount. The optimization of the analyzed success drivers in this research is therefore not sufficient to lead to huge success. The results nevertheless show that potential donors indeed pay attention to various characteristics present at every project. If a project is not sincere, people will directly discover this. Cheating becomes therefore very hard.

Crowdfunding platforms in turn should facilitate and guide project initiators in such a way that they can easily optimize the success drivers. Platforms should provide advice on how

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to write project pitches, make videos and how to configure donation categories. They could

also implement algorithms to automatically analyze pitches in terms of word count, sentiment

and readability.

6.2 Limitations

This research is an explorative study of drivers of crowdfunding success. Due to the large

sample size results can be regarded as reliable. Nevertheless the data is sampled from one

platform only. Generalizing the conclusions over multiple platforms therefore needs to be

done with caution. Crowdfunding platforms very much look alike, but there are also subtle

differences among them, e.g. in payout policy or awarding of perks. Some crowdfunding

platforms only pay out the raised amount to the project initiators once the funding goal is met

or exceeded. In addition, some crowdfunding platforms, especially those based out of the US,

provide ownership or profit shares to project funders. These differences in set up may alter the

effects of the drivers for success.

Because of the newness of crowdfunding, this research has attempted to examine a

broad range of possible drivers for success. This has resulted in an extensive conceptual

model where drivers could only be analyzed in a quantified form. This has resulted in

different proxies that only can provide a rough measure for the drivers. If in depth research

would be done on specific part of a crowdfunding project, further development of measures

would definitely be necessary.

6.3 Further research

One of the reasons for the limited generalizability of this study is the chosen perspective.

Comparing donations to crowdfunding projects with donations to charities may narrow the

range of aspects getting analyzed. In further research it would be advisable to take other

motives for contributing into account. An alternative driver for donating could for example be

the possibility of pre-ordering the end result or product of an innovative project (Kappel

2008). In such cases, attention should be paid to the monetary value of the chosen perk

compared to the donor's donated amount. If this is in line, it is questionable whether

donations can still be regarded as gifts.

The options of extending this research while keeping the perspective of charitable

donations are nevertheless plentiful. Given the influence of the project and donation category

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descriptions, a more in depth text analysis could be done in order to get a better understanding of textual elements that lead to success. Next to this, the level of analysis could be shifted from project to donor in order to analyze (actual) donor behavior more in depth. In order to understand motives more in depth, actual donors could be questioned.

To get a better understanding of donating behavior, donations could also be analyzed over time. Analyzing projects from start to end would provide insight into when most donations are made. This could unveil a tipping point from where on it is almost certain that a project will reach its funding goal. This could show until what point only people within the 'inner circle' (e.g. friends and family) of the project initiators donate and from where on 'the crowd' (i.e. really unknown people) starts donating. Only if projects make it to the latter stage, the full potential of the crowd is unleashed and projects can become really successful. Also the runtime of a project could be of influence on success, a variable that is not used in this research. Complementary to this, platform endogenous drivers could be examined more closely, such as the effect of featuring and promoting projects on external (social media) platforms and the effects of viral marketing.

7 Bibliography

Aderman, D. and L. Berkowitz (1970) 'Observational Set, Empathy, and Helping.', *Journal of personality and social psychology* 14(2): 141.

Aderman, D., S.S. Brehm and L.B. Katz (1974) 'Empathic Observation of an Innocent Victim: The just World Revisited.'.

Averill, J.R. (1973) 'Personal Control Over Aversive Stimuli and its Relationship to Stress.', *Psychological bulletin* 80(4): 286.

Bagozzi, R.P. (1975) 'Marketing as Exchange', The Journal of Marketing: 32-39.

Banerjee, A.V. (1992) 'A Simple Model of Herd Behavior', *The Quarterly Journal of Economics* 107(3): 797-817.

Batson, C.D. (1987) 'Prosocial Motivation: Is it Ever Truly Altruistic', *Advances in experimental social psychology* 20: 65-122.

Batson, C.D., B.D. Duncan, P. Ackerman, T. Buckley and K. Birch (1981) 'Is Empathic Emotion a Source of Altruistic Motivation?', *Journal of personality and social psychology* 40(2): 290.

Batson, C.D., K. O'Quin, J. Fultz, M. Vanderplas and A.M. Isen (1983) 'Influence of Self-Reported Distress and Empathy on Egoistic Versus Altruistic Motivation to Help.', *Journal of personality and social psychology* 45(3): 706.

Baumann, D.J., R.B. Cialdini and D.T. Kendrick (1981) 'Altruism as Hedonism: Helping and Self-Gratification as Equivalent Responses.', *Journal of personality and social psychology* 40(6): 1039.

Bendapudi, N., S.N. Singh and V. Bendapudi (1996) 'Enhancing Helping Behavior: An Integrative Framework for Promotion Planning', *The Journal of Marketing*: 33-49.

Bruce, N. and M. Waldman (1990) 'The Rotten-Kid Theorem Meets the Samaritan's Dilemma', *The Quarterly Journal of Economics* 105(1): 155-165.

Author: Mart Evers (302538)

Carey, J.R., S.H. Clicque, B.A. Leighton and F. Milton (1976) 'A Test of Positive Reinforcement of Customers', *The Journal of Marketing*: 98-100.

Chen, Y., Q. Wang and J. Xie (2011) 'Online Social Interactions: A Natural Experiment on Word of Mouth Versus Observational Learning', *Journal of Marketing Research* 48(2): 238-254.

Childers, T.L. and M.J. Houston (1984) 'Conditions for a Picture-Superiority Effect on Consumer Memory', *Journal of Consumer Research*: 643-654.

Cialdini, R.B., M. Schaller, D. Houlihan, K. Arps, J. Fultz and A.L. Beaman (1987) 'Empathy-Based Helping: Is it Selflessly Or Selfishly Motivated?', *Journal of personality and social psychology* 52(4): 749.

Cialdini, R.B. and D.A. Schroeder (1976) 'Increasing Compliance by Legitimizing Paltry Contributions: When Even a Penny Helps.', *Journal of personality and social psychology* 34(4): 599.

Clary, E.G. and L. Orenstein (1991) 'The Amount and Effectiveness of Help: The Relationship of Motives and Abilities to Helping Behavior', *Personality and Social Psychology Bulletin* 17(1): 58-64.

Coke, J.S., C.D. Batson and K. McDavis (1978) 'Empathic Mediation of Helping: A Two-Stage Model.', *Journal of personality and social psychology* 36(7): 752.

Cosh, A. (2009) 'Outside Enterpreneurial Capital*', Economic Journal 119(540): 1494.

Davis, M.H., J.G. Hull, R.D. Young and G.G. Warren (1987) 'Emotional Reactions to Dramatic Film Stimuli: The Influence of Cognitive and Emotional Empathy.', *Journal of personality and social psychology* 52(1): 126.

Dovidio, J.F., J.L. Allen and D.A. Schroeder (1990) 'Specificity of Empathy-Induced Helping: Evidence for Altruistic Motivation.', *Journal of personality and social psychology* 59(2): 249.

Flesch, R. (1972) Marks of Readable Style: A Study in Adult Education. AMS Press.

Flesch, R. (1948) 'A New Readability Yardstick.', Journal of applied psychology 32(3): 221.

Fraser, C., R.E. Hite and P.L. Sauer (1988) 'Increasing Contributions in Solicitation Campaigns: The use of Large and Small Anchorpoints', *Journal of Consumer Research*: 284-287.

Giesler, M. (2006) 'Consumer Gift Systems', Journal of consumer research 33(2): 283-290.

Griffin, M., B.J. Babin, J.S. Attaway and W.R. Darden (1993) 'Hey You, can Ya Spare some Change? the Case of Empathy and Personal Distress as Reactions to Charitable Appeals', *Advances in consumer research* 20: 508-514.

Harvey, J.W. (1990) 'Benefit Segmentation for Fund Raisers', *Journal of the Academy of Marketing Science* 18(1): 77-86.

Hockenson, L. (Last updated 2012) 'Crowdfunding: How Indiegogo Connects Concepts with Cash' (a webpage of Mashable.com). Accessed 5/19 2012 http://mashable.com/2012/04/24/indiegogo-video/.

Holbrook, M.B. and W.L. Moore (1981) 'Feature Interactions in Consumer Judgments of Verbal Versus Pictorial Presentations', *Journal of Consumer Research*: 103-113.

Howe, J. (Last updated 2006) 'Crowdsourcing: A Defenition'. Accessed 10/26 2011 http://crowdsourcing.typepad.com/cs/2006/06/crowdsourcing_a.html.

Hui, M.K. and J.E.G. Bateson (1991) 'Perceived Control and the Effects of Crowding and Consumer Choice on the Service Experience', *Journal of Consumer Research*: 174-184.

Jacoby, J. (1977) 'Information Load and Decision Quality: Some Contested Issues', *Journal of Marketing Research*: 569-573.

Jacoby, J., D.E. Speller and C.A. Kohn (1974) 'Brand Choice Behavior as a Function of Information Load', *Journal of Marketing Research*: 63-69.

Jenkins, H. (2006) Convergence Culture: Where Old and New Media Collide. NYU Press.

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Kappel, T. (2008) 'Ex Ante Crowdfunding and the Recording Industry: A Model for the Us', *Loy.LA Ent.L.Rev.* 29: 375.

Kelman, H.C. (1961) 'Processes of Opinion Change', Public opinion quarterly 25(1): 57-78.

Krebs, D. (1975) 'Empathy and Altruism.', *Journal of personality and social psychology* 32(6): 1134.

LaTour, S.A. and A.K. Manrai (1989) 'Interactive Impact of Informational and Normative Influence on Donations', *Journal of Marketing Research*: 327-335.

Lowrey, T.M., C.C. Otnes and J.A. Ruth (2004) 'Social Influences on Dyadic Giving Over Time: A Taxonomy from the giver's Perspective', *Journal of Consumer Research* 30(4): 547-558.

Malinowski, B. (1978) Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea. Psychology Press.

Mauss, M. (2002) The Gift: The Form and Reason for Exchange in Archaic Societies. Psychology Press.

Moore, E.M., W.O. Bearden and J.E. Teel (1985) 'Use of Labeling and Assertions of Dependency in Appeals for Consumer Support', *Journal of Consumer Research*: 90-96.

Petersen, S.E., P.T. Fox, M.I. Posner, M. Mintun and M.E. Raichle (1989) 'Positron Emission Tomographic Studies of the Processing of Singe Words', *Journal of cognitive neuroscience* 1(2): 153-170.

Sherif, M., D. Taub and C.I. Hovland (1958) 'Assimilation and Contrast Effects of Anchoring Stimuli on Judgments.', *Journal of Experimental Psychology; Journal of Experimental Psychology* 55(2): 150.

Sherry Jr, J.F. (1983) 'Gift Giving in Anthropological Perspective', *Journal of Consumer Research*: 157-168.

Skågeby, J. (2010) 'Gift-Giving as a Conceptual Framework: Framing Social Behavior in Online Networks', *Journal of Information Technology* 25(2): 170-177.

Strickler, Y. (Last updated 2011) 'Happy Birthday Kickstarter!'. Accessed 02/03 2012 http://www.kickstarter.com/blog/happy-birthday-kickstarter.

Swinyard, W.R. and M.L. Ray (1977) 'Advertising-Selling Interactions: An Attribution Theory Experiment', *Journal of Marketing Research*: 509-516.

Tavassoli, N.T. (1998) 'Language in Multimedia: Interaction of Spoken and Written Information', *Journal of Consumer Research* 25(1): 26-37.

Wortman, C.B. (1975) 'Some Determinants of Perceived Control.', *Journal of personality and social psychology* 31(2): 282.

Zhang, J. and P. Liu (2011) 'Rational Herding in Microloan Markets'.

8 Appendices

8.1 Appendix A: List of variables

IMAGE

- team_members number of project initiators
- updates number of updates
- external number of external websites project is featured on
- funding_goal funding goal set at start of project

CAUSE OF NEED

- dCategory_Creative dummy category Creative
- dCategory_GoodCause dummy category Good Cause
- dCategory_Entrepreneurial dummy category Entrepreneurial

PICTURE APPEAL

- dPitch_type_nothing dummy pitch visual nothing
- dPitch_type_image dummy pitch visual image
- dPitch_type_video dummy pitch visual video
- gallery_image number of images in gallery
- gallery_video number of videos in gallery

PERSPECTIVE ADVOCATED (moderated by motive)

- sentiment sentiment score of project description
- flesch_reading_ease Flesch Reading Ease score of project description (readability measure)
- description_word_count number of words in project description

SOCIAL COMPARISONS (moderated by motive)

• comments - number of comments

DECISIONAL CONTROL (moderated by motive)

- dCategory_Creative dummy category Creative
- dCategory_GoodCause dummy category Good Cause
- dCategory_Entrepreneurial dummy category Entrepreneurial
- number_of_perks number of donation categories

LABELING (moderated by motive)

- thank_you_expressed in donation category descriptions donor is thanked
- labeling in donation category descriptions donor is positively labeled

REQUEST SIZES (moderated by motive)

- avg_perk_amount average amount of donation categories
- token_help_signalled_relative lowest donation category has a token amount using relative cut off (1% of funding goal)
- token_help_signalled_absolute lowest donation category has a token amount using absolute cut off (<\$10)

MOTIVE

- fraction_name_anonymous fraction of donors listed as anonymous
- fraction_donation_anonymous fraction of donated amount listed as anonymous
- fraction_serious_help_relative fraction of donors provided serious help (using relative cut off)
- fraction_motive_altruistic the average of fraction_name_anonymous,
 fraction_donation_anonymous and fraction_serious_help_relative

DEPENDENT VARIABLES

raised_amount - total amount donated by donors

Appendix B: Example of IndieGoGo project pages

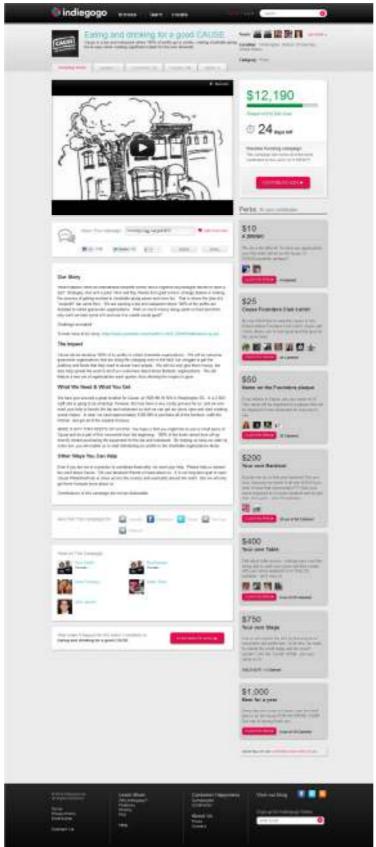


Figure 2: Project pitch page

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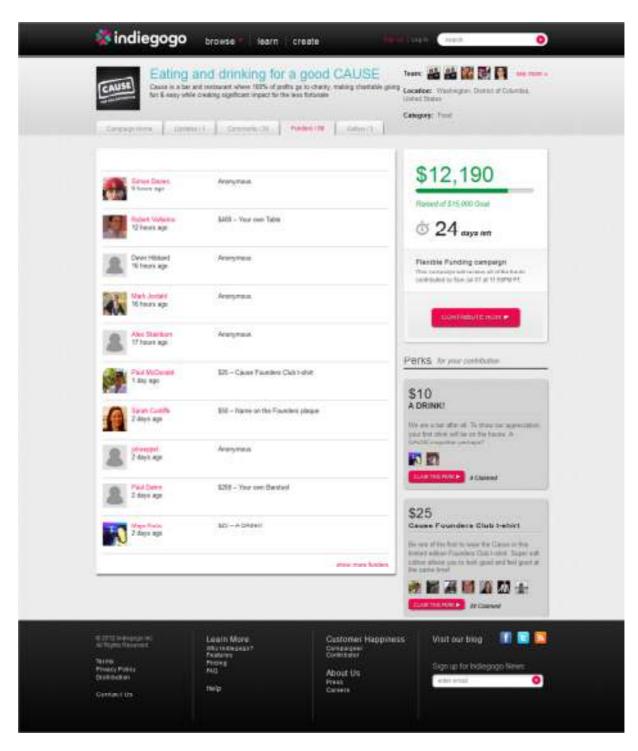


Figure 3: Funders page

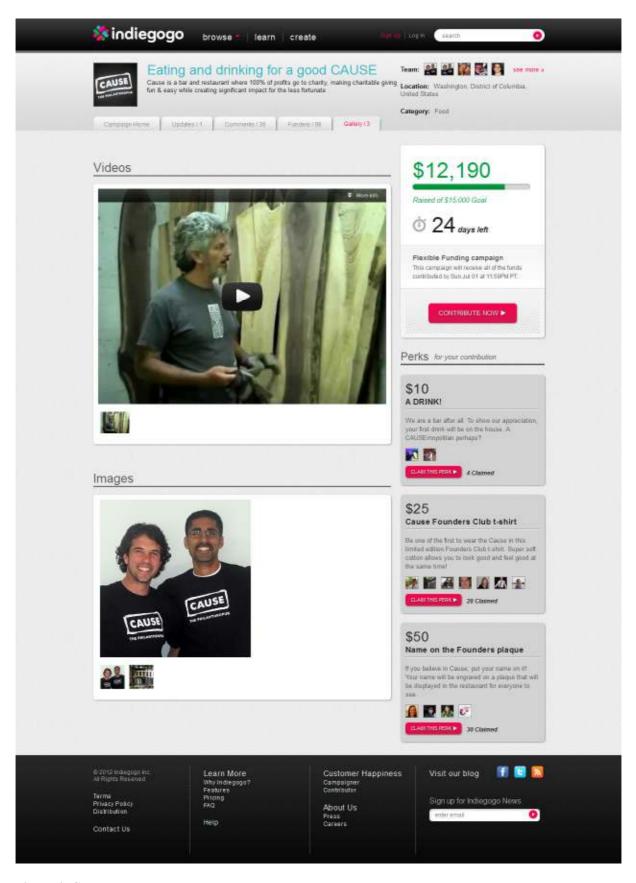


Figure 4: Gallery page

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