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USING CROWDFUNDING FOR START-UP EVALUATION: HOW TASK REPRESENTATION INFLUENCES PREDICTION ACCURACY OF THE CROWD

Research in Progress

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Abstract

The paper at hand examines if the crowd can offer valuable support in evaluating start-ups. In doing so, we plan to conduct an experiment 1.) to test if the crowd is capable to support experts in evaluating start-ups 2.) to examine how differences in task-representation (i.e. rating scales vs. a crowdfunding mechanism) influences cognitive processing of the crowd and 3.) to examine how types of cognitive processing (i.e. system 1 thinking vs. system 2 thinking) relate to prediction accuracy of the crowd. To this end, we plan to introduce crowdfunding as a new evaluation mechanism to support the crowd in coming up with more accurate predictions of start-up value. Our theoretical contribution is twofold. First, we aim to show if the crowd can be used to support Venture capitalists in evaluating start-ups, in the sense that their evaluations agree with expert evaluations. Second, we plan to contribute to a better understanding about how the design of evaluation mechanisms influences peoples cognitive processing and the crowds ability to predict start-up value.

Keywords: Start-up Evaluation, Crowdfunding Mechanism, Rating Scales, Decision Support

1 Introduction

Evaluating start-ups is an essential task to determine the economic viability and prospects of a new business. Traditionally, this task has been carried out by venture capitalists (VC) who select which companies should receive funding based on their predictions of future market demand (Baum and Silverman, 2004; Gompers and Lerner, 2004; Shane and Venkataraman, 2003). In doing so, VCs act as important gatekeepers to critical financial resources that are considered as a prerequisite for start-up success (Ferrary and Granovetter, 2009; Mollick and Nanda, 2016). However, during evaluations VCs are often confronted with a large quantity of business ideas. Consequently, the quality and effectiveness of VC evaluations suffer from this information overload (Kollmann and Kuckertz, 2010).

To counteract such problems in other domains, companies have recently started to incorporate crowdsourcing into evaluation tasks (Blohm *et al.*, 2016). For example, crowd ideation platforms use the crowd to evaluate and preselect promising ideas by providing users with IT-based decision tools such as rating scales that allow rating on several dimensions of idea quality. Usually, such dimensions include items that refer to the general value, novelty, specificity, or feasibility of an idea (Dean *et al.*, 2006). Empirical research showed that such crowd evaluation mechanisms are equally precise as expert ratings (Poetz and Schreier, 2012; Mollick and Nanda, 2016).

One problem of current evaluation mechanisms is that they are very simplistic and therefore may undermine a user's ability to accurately judge certain issues (Riedl *et al.*, 2013). Thus, conventional rat-

ing mechanisms often prompt individuals to engage in impulsive decisions when in fact more reflective thinking would be required. Examples for such mechanisms are five-star rating scales or thumbs up/ down scales that entice individuals into engaging in rather quick, and non-deliberate modes of decision making (Riedl *et al.*, 2010). These rating mechanisms, however, are not able to capture more deliberate decision making, which is required to assess the viability of a start-up.

One instantiation of crowdsourcing that offers great potential as a decision support tool is crowdfunding. Previous research showed that crowdfunding can be effectively used as a rating mechanism to engage the crowd in making decisions on budget allocation within a company (Feldmann *et al.*, 2014). Moreover, evaluations of the crowd do not only correlate with expert evaluations but they can reliably complement and support expert opinions on complex issues such as funding decisions (Mollick and Nanda, 2016). Therefore, crowdfunding as a rating mechanism represents one possible solution to the above discussed problem as it allows to engage a crowd in decision making, thereby supporting experts who face an increased number of complex decisions. In addition to that, we propose crowdfunding as a valid mechanism to address the above discussed problem of impulsive decision making. Thus, we argue that crowdfunding with its unique properties (i.e., task representation) captures distinctive rating dimensions that prompt users to engage in more reflective thinking compared to more conventional evaluation mechanisms (i.e. rating scales). Reflective thinking might, in turn, let the crowd come up with more accurate evaluations of a start-up as it encourages the user to engage in more deliberate decision making, which possibly leads to more accurate predictions of future start-up success. This leads us to propose the following research question:

How do IT-based evaluation mechanisms effect a crowds ability to accurately judge start-up success?

For this study, we will conduct a randomized experiment in which we confront start-up funding experts as well as a student crowd with two different representations of an IT-mediated task, with the purpose of evaluating real-life start-up businesses. The evaluations of experts and students will be then compared to real funding data taken from Crunch-Base which serve us a proxy of a startups real value. Our paper aims at contributing to current IS literature in two ways: First, we intend to examine if the crowd is able to support VCs who are confronted with an increasing number of complex funding decisions. In doing so, we aim at examining if the crowd can predict start-up success (Davila *et al.*, 2003; Baum and Silverman, 2004) as accurately as experts. Second, we investigate how new evaluations mechanisms (i.e. a crowdfunding evaluation mechanism) can help the crowd make more accurate predictions of complex issues such as the evaluation of start-ups. To this end, we draw on the dual process theory of decision making (Evans, 2008; Kahneman and Tversky, 2000; Stanovich and West, 2000) to examine how different forms of task representation (i.e., a rating scale vs a crowdfunding evaluation mechanism) for open business validation affect the decision quality of users and translate into differences in mechanism accuracy (Blohm *et al.*, 2016).

2 Theoretical Background

2.1 Limitations in Assessing Start-ups

The proper evaluation of new ventures has important economic implications. Thus, the evaluation of ventures often determines which start-ups receive financial support and which start-ups do not (Goldfarb *et al.*, 2009; Ferrary and Granovetter, 2009). As of today, this evaluation is usually based on the VC's perception of a start-up's prospects. However, identifying potentially valuable start-ups is seen as an arduous and increasingly difficult task. While VCs are confronted with an increasing number of funding inquiries, they have only limited capacity to screen start-up proposals. Because of this, valuable start-ups may be missed simply due to resource constraints of VCs (Kollmann and Kuckertz, 2010). Typically, more than 80 percent of all start-up ideas a VC receives are rejected during the first step of the evaluation (Roberts, 1991). Additionally, VC ratings are often susceptible to systematic errors, such as for example similarity bias which often leads them to support the wrong start-ups

(Franke *et al.*, 2006). One way to counteract these problems may be crowdsourcing which denotes “a participative online activity in which an individual, an institution, a nonprofit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number, via a flexible open call, the voluntary undertaking of a task” (Estellés-Arolas and González-Ladrón-De-Guevara, 2012).

2.2 Crowd Evaluation

Recently, many companies have started to use the collective intelligence of a heterogeneous crowd in community-based idea evaluation to identify both creative and valuable ideas (Berg-Jensen *et al.*, 2010). Thus, the concept of crowd voting proved to provide valuable results in the context of systematically evaluating early-stage product ideas in online innovation communities (Riedl *et al.*, 2013). Thereby, a heterogeneous crowd, most commonly end users of a certain product, rates certain product ideas. This rating constitutes a proxy to distinguish between high- and low-quality ideas and supports decision making in early stages of the innovation process by providing insights into which ideas should be further developed and which should be abandoned by a company (Girotra *et al.*, 2010; Soukhoroukova *et al.*, 2012). Moreover, the crowd generally applies the same evaluation and selection criteria for start-ups in equity crowdfunding (e.g., Ahlers *et al.*, 2015). Thus, in the context of start-up evaluation, the crowd might therefore constitute a first preselection mechanism to identify valuable ideas, thereby acting as decision support for Venture Capitalists (Zacharakis and Meyer, 2000) and providing more diverse viewpoints on potentially valuable business ideas. Crowdsourcing thereby represents a cost-efficient and scalable alternative to identify valuable start-ups compared to costly expert panels due to the utilization of information systems (Arrow *et al.*, 2008; Riedl *et al.*, 2013).

2.3 Current Evaluation Mechanisms to Leverage Crowd Wisdom

2.3.1 Rating Scales

Vcs typically estimate the value of a start-up by evaluating criteria such as the creativity of the firm’s product and business model, the start-up team, and the expected risk related to the investment (Franke *et al.*, 2008; Shepherd and Zacharakis, 2002). We argue that the evaluation of early-stage start-ups includes dimensions that are commonly known from the literature of idea evaluation: novelty, feasibility, relevance, and specificity (Dean *et al.*, 2006). However, a VC’s decision will also include a more reflective and deliberate scope that contains the belief in the future success potential of such ventures.

When Vcs decide to use a crowd-based mechanism for evaluating a new venture, the aim is to identify valuable start-ups and to preselect firms that have the potential for investment. In comparing different forms of mechanisms, we therefore define an evaluation mechanism’s appropriateness as its accuracy of achieving a high level of decision quality, meaning its precision in identifying valuable start-ups. As measuring such a quality objectively is a typical problem of studies in other fields (Chen *et al.*, 2009; Girotra *et al.*, 2010), we use the Series A funding success of start-ups as baseline, which is a commonly applied measurement for early-stage start-up success (Davila *et al.*, 2003; Baum and Silverman, 2004).

From the decision maker’s point of view (i.e., the crowd), the task of evaluating start-ups is represented by the actual evaluation mechanism that is offered (Shaft and Vessey, 2006). The accuracy of a certain mechanism is thereby defined by how well it supports the crowd in doing the evaluation task. In the context of our study, this means that the effectiveness of an evaluation mechanism (i.e., rating scale or funding mechanism) is determined by how well it supports the crowd in coming up with evaluations that agree with those of Vcs (i.e., our baseline). Thus, identifying appropriate task representations (i.e., mechanisms) in order to evaluate start-ups by the crowd is the purpose of our experimental study.

Currently one of the most common evaluation mechanisms applied to leverage the wisdom of the crowds are rating scales (Di Gangi and Wasko, 2009; Riedl *et al.*, 2013). Hereby, a user evaluates alternatives by applying a predefined set of criteria. Rating scales assess each alternative separately by judging and identifying the alternative that is closest to a user's preferred optimum (Limayem and De-Sanctis, 2000). The individual ratings can then be aggregated into group decisions (Todd and Benbasat, 1999). Scales that are commonly used in the evaluation of idea qualities are for instance binary rating scales ("thumbs up/down"), five-point rating scales ("5-star rating"), or complex rating scales that include several dimensions of idea quality (Riedl *et al.*, 2010). Such rating scales have proven to be a suitable representation of evaluation tasks in previous studies (Blohm *et al.*, 2016; Riedl *et al.*, 2013).

2.3.2 Crowdfunding as a Rating Mechanism

Crowdfunding is part of the more general concept of crowdsourcing and can be defined as "an open call, essentially through the Internet, for the provision of financial resources" (Schwienbacher and Larralde, 2010, p.4). So far, most of the research deals with crowdfunding as a method of financing start-ups. However, most recently, researchers have discovered that crowdfunding is also a valuable tool for support in other domains and applications. Mollick and Nanda (2016), for example, found out that crowdfunding is a viable method to identify "false negatives". The term describes viable projects that have been turned down by expert funders. In line with this, Feldmann *et al.* (2013) showed that crowdfunding can also be used as a mechanism for idea assessment and decision support within organizations. Their findings suggest that crowdfunding presents a promising mechanism that allows a company to engage its employees in complex decisions such as project budgeting.

Although recent literature seems to indicate that crowdfunding presents a promising evaluation mechanism, relatively little is known about how crowdfunding performs compared to other evaluation mechanisms such as complex scales, five-star ratings, or binary rating scales. Riedl *et al.* (2013), for instance, notes that crowdfunding might be more apt to elicit the true beliefs regarding a product or service than rating scale-based product evaluations and other crowdsourcing approaches. In line with this, we argue that the mere representation of an evaluation task as a crowdfunding task elicits a different rating mindset that leads users to more accurate estimates. Therefore, we argue that crowdfunding elicits more cognitive effort because people have to trade off a certain campaign against other campaigns.

2.4 Dual Process Theory of Decision Making

Although a large body of literature deals with biases and errors in decision making and judgments, there is still relatively little knowledge about how to improve the process of decision making (Milkman *et al.*, 2009), especially through the instantiation of IT. However, with the growing tendency to let the public participate in important economic decisions, mechanisms that support accurate decision making seem more important today than ever before. After all, erroneous decisions are commonly associated with high personal and social costs (Milkman *et al.*, 2009).

One way towards improving decision making is to examine the mental processes that underlie biased decision making. A theory that is particularly helpful in this context is the dual process theory of decision making. This theory offers a solid theoretical framework for how to avoid biases in decision making. The underlying assumption of this theory is that people make use of two cognitive modes, one is characterized by intuition and one by reasoning (Kahneman, 2012). In line with the conceptualization of Kahneman (2012), Stanovich and West (2000) distinguish between system 1 (i.e., intuitive thinking) and system 2 (i.e., deliberate thinking) thinking. Whereas system 1 thinking is often described as being fast, automatic, effortless, associative, implicit, and emotional, system 2 thinking is often described as slow, serial, effortful, more likely to be consciously monitored, and deliberately controlled.

Research argues that system 1 thinking often prevails in decision making (Kahneman and Frederick, 2002). As a result, when faced with complex decisions, people often rely on their intuition which is consequently leading them to express erroneous decisions (Kahneman, 2003; Evans, 2003; Evans, 2008). This is also supported by empirical research showing that people who engage in impulsive behaviour often make poor decisions (Hofmann *et al.*, 2009; Metcalfe and Mischel, 1999; Tangney *et al.*, 2004). Popular examples include compulsive behaviours such as gambling, overeating, smoking and drinking. However, one promising strategy to avoid such decision biases is to prompt system 2 thinking (Milkman *et al.*, 2009). System 2 thinking is characterized as being more abstract and also permitting hypothetical thinking, a type of thinking that has been shown to positively affect the outcomes in judgement and decision tasks (Kahneman and Frederick, 2002).

3 Theoretical Development and Hypotheses

Current literature suggests that evaluating start-ups is a highly complex process that requires much time and many resources. VCs are thus facing an increasing number of start-up proposals which leaves limited time to screen each proposal in more detail. As a result of this, experts lack time to accurately judge the prospects of a start-up (Kollmann and Kuckertz, 2010). New IT-based mechanisms that allow to integrate the crowd hold great potential with regard to the aforementioned problem. Crowdsourcing, for example, offers a promising solution to increase the quality of idea evaluation by integrating diverse viewpoints and aggregating dispersed knowledge (Arrow *et al.*, 2008; Riedl *et al.*, 2013). The promise of crowdsourcing is also supported by empirical evidence showing that the crowd comes up with decisions that closely agree with, and in some cases are even more accurate than, experts opinions (Poetz and Schreier, 2012; Budescu and Chen, 2015). Further research seems to indicate that especially crowdfunding might offer a promising solution to engage the crowd in determining the value of startups (Mollick and Nanda, 2016; Feldmann *et al.*, 2013; Ahlers *et al.*, 2015). However, despite the preliminary findings, relatively little is known about how crowdfunding enables the crowd to adequately judge new ventures and how the provision of such a crowdfunding mechanism can put the crowd in the position to efficiently support VCs in adequately evaluating start-ups. This leads us to propose the following hypothesis:

H1: *Given appropriate evaluation mechanisms the crowd is capable to judge start-ups as accurately or even more accurately as VCs.*

A problem commonly observed in private as well as professional domains (Hutton and Klein, 1999) is that people often come to make quick decisions simply because they are guided by their intuition and rely on what is commonly referred to system 1 thinking. Since system 1 thinking draws on peoples past experiences, it is characterized through only little reflection and farsightedness, thereby leading people to make rather quick and potentially erroneous decisions. One way to counteract this problem is through strategies that help shifting people from system 1 to system 2 thinking (Bazerman and Moore, 2008). System 2 thinking differs from system 1 thinking in that it permits abstract hypothetical thinking that is commonly associated with intelligence and logical reasoning. Hypothetical thinking, thereby, describes a process of making decisions by constructing mental models or simulations of future possibilities (Evans, 2003). Along these lines, various strategies have been developed and discussed with the aim of making people shift from system 1 to system 2 thinking (Milkman *et al.*, 2009).

One possible strategy to succeed in this transition, is to get decision makers to take a different perspective on a certain problem (Gigerenzer *et al.*, 1991; Kahneman and Lovallo, 1993). This can be achieved by means as simple as changing task representation. Previous studies were able to show that humans tend to move from system 1 thinking to system 2 thinking when they need to consider and choose between multiple options simultaneously rather than accepting or rejecting options separately (Bazerman *et al.*, 1992; Bazerman *et al.*, 1995; Jolls *et al.*, 1998; Moore and Loewenstein, 2004). In line with this, more recent research in the field of information systems seems to suggest that IT mediated task representation has a significant effect on peoples perceived ease of use as well as their decision quality (Blohm *et al.*, 2016).

We therefore argue that the task representation of the evaluation affects users' cognitive processing by either fostering system 1 or system 2 thinking. It can be argued that operating a rating scale is very intuitive (Blohm et al., 2016). By using a rating scale, users judge the quality of each idea individually and sequentially based on given evaluation criteria (Riedl et al., 2013). In doing so, we propose that users engage in system 1 thinking as rating scales prompt users to rate ideas very quickly and easily since they do not require them to engage in contradictory or trade-off decisions.

By contrast, a crowdfunding mechanism constitutes a slightly more complex form of task representation. Thus, by using a crowdfunding mechanism, users are presented with more than one rating object simultaneously to which they should allocate a predetermined amount of funds (Belleflamme et al., 2015). This forces users to evaluate one project against other projects. Hence, when evaluating one project, a user also considers other project information to make a reasonable decision. In doing so, we argue that users are more likely to make use of system 2 thinking as the comparison of one project with other projects and the decision of how to allocate funds usually involves deliberate reasoning. Thus, users who make use of a crowdfunding mechanism usually face a trade-off decision because they only have a predetermined amount of money that they have to allocate among a number of projects. In sum, we argue that different evaluation mechanisms activate different cognitive evaluation patterns in the decision process. Based on the above consideration, we propose the following hypothesis:

***H1a:** The evaluation mechanism influences users' cognitive processing such that users of the rating scale are more likely to engage in system 1 thinking, while users of the crowdfunding evaluation mechanism are more likely to engage in system 2 thinking.*

Literature suggests that modes of cognitive processing play a key role in decision making and judgment. In past experiments, Kahneman and Frederick (2002) have shown that subjects, when faced with complex tasks (i.e., cognitive reflection tasks), often rely on intuitive decision making leading them to erroneous decisions. This can be explained by the simple fact that people are not accustomed to thinking hard and often content with trusting a plausible judgment that comes quickly into mind. Similar experiments showed that logical accuracy decreases when people operate under time pressure (St. Evans and Curtis-Holmes, 2005), a condition that is argued to prompt intuitive thinking. One promising strategy to achieve this is to encourage people to take a different perspective, simply by persuading decision makers "to consider the opposite" of whatever decision they are about to make. Such a strategy has been shown to be helpful in reducing a variety of common biases such as overconfidence, anchoring, and hindsight biases, thereby promoting accurate decision making (Mussweiler et al., 2000; Koehler and Harvey, 2004).

While intuitive decision making often results in decision biases, reflective thinking is a way to foster reasoned and, therefore, more accurate predictions (Kahneman and Tversky, 2000). Thus, we argue that more reflective thinking results in more accurate evaluations of start-up value by the crowd. In line with earlier considerations, we further argue that intuitive thinking results in less accurate evaluations made by the crowd. Based on the above consideration, we derive the following hypothesis:

***H1b:** A user's type of cognitive processing (i.e. either system 1 thinking or system 2 thinking) mediates the effect of the evaluation mechanism on decision quality such that system 2 thinking leads to more accurate start-up evaluations than system 1 thinking.*

4 Methodology

4.1 Experimental Design

To test our hypotheses, we aim to conduct a within-subject experiment (Creswell, 2014). We chose this method because it allows us to derive a clear causal link between the introduced evaluation mechanism and people's evaluation accuracy, while at the same time minimizing participant induced variation that is not due to experimental manipulation (Field and Hole, 2003). To prevent possible order

effects (i.e. differences that might accrue due to the order of experimental conditions occurring) a Latin square design will be employed. Each subject will, therefore, be assigned to two conditions (A and B) in a random sequence. Thus, one half of the participants will do the conditions in the order AB while the other half will do them in the opposite order (B then A). The conditions will vary along the evaluation mechanism that people will be presented with. This means that subjects will either be presented with (A) a rating scale mechanism followed by (B) a crowdfunding mechanism or they will be presented with (B) a crowdfunding mechanism followed by (A) a rating scale mechanism.

4.2 Experiment Sample

To conduct our experiment, we make use of a convenience sample. To this end, we will draw on students as they are easily accessible and able to help us to test our hypothesis quickly and cheaply before we are going to test our hypothesis in the field with a more selected crowd. Additionally, the choice of selecting students for our crowd-based experiment conforms to prior research that has been shown that student samples largely correspond to typical crowdsourcing ideation tournament participants (Füller, 2010). Thus, similar to student populations, crowdsourcing samples mostly consist of people who are better educated, come from a geographically more diverse background, and have lower levels of income than the average population (Ipeirotis, 2010; Ross *et al.*, 2010). The students for our experiment will be recruited during two university courses at a German university and will mainly constitute of undergraduate students. As a reward for their participation, the students will be granted additional course credits. Additionally, we will draw on a sample of selected start-up funding experts which we are going to recruit from the university based incubator to obtain evaluations that our student crowd ratings can be compared to.

4.3 Materials and Manipulation

As the object of the evaluation, the subjects of the experiment (i.e. start-up funding experts as well as the student crowd) will be confronted with real-world start-ups in the B2C domain. The main rationale behind this is to provide participants with start-ups they can relate to and that they are able to evaluate. To this end, we will draw on CrunchBase, a database that provides general information about start-ups (i.e. a company's offerings, the team, and VC funding etc.). Thus, each participant in our sample will be required to evaluate six start-ups in total, based on the information obtained from CrunchBase. For the purpose of better comparability, the detailed start-up information will be presented in a standard format (subsequently referred to as start-up pitch), including a short description of the company, its team, as well as information on its product or service. Participants in both groups will be represented with two evaluation mechanisms (i.e. a rating scale evaluation mechanism and a crowdfunding evaluation mechanism). Thus, subjects assigned to group 1 will be presented with a simple rating scale allowing them to evaluate each start-up pitch regarding the dimensions' general value, novelty, specificity and feasibility (Dean *et al.*, 2006). The evaluation mechanism will be designed similar to online idea communities so that subjects can evaluate each start-up pitch individually and in sequential order. The first evaluation mechanism will be followed by a crowdfunding evaluation mechanism. The crowdfunding mechanism will display six start-up pitches at a time (i.e. concurrently) and in that it will allow subjects to evaluate start-ups by allocating funds. Therefore, subjects will be presented with six start-up pitches in a comprised form. In order to make their evaluations more reliable, each participant will be provided with a fictional amount of money to allocate for funding. The dispensable amount of money will be calculated by adding up the total Series A funding of all companies extracted from the database and divided by the number of subjects participating in the experiment. Subjects assigned to group 2 will be presented the same evaluation mechanisms but in reversed order (see Experimental Design). In between the conditions (i.e. after the first evaluation mechanism as well as after the second) we will use a picture-word Stroop task to measure people's construal level which has been successfully used as a proxy to measure peoples cognitive thinking style before (Bar-Anan *et al.*, 2007; Stroop, 1935; Trope and Liberman, 2010; Metcalfe and Mischel, 1999).

4.4 Analysis and Variables

To determine the participants' evaluation accuracy, their start-up evaluations will be compared to actual evaluations of the start-ups making up our sample. For this purpose, we intend to use information on the respective Series A funding start-ups received which we obtain from CrunchBase. Thus, Series A funding constitutes our baseline and serves us as our gold standard for a start-up's monetary value. To determine the accuracy of the ratings of our experimental groups, we will aggregate them and compare the relative ranking of start-ups in each condition to our baseline data (Blohm *et al.*, 2016; Poetz and Schreier, 2012).

Additionally, to rule out other influencing factors, we will collect control variables such as participants age, gender, educational background, income and experience in evaluating start-ups. Moreover, we plan to measure people's cognitive processing style at the beginning of the experiment in a way that allows us to have a baseline value as well as to control individual differences in this variable potentially affecting the results of our experiment. To this end, we will use a questionnaire by Epstein *et al.* (1996) that was specifically developed to measure differences in intuitive-experiential and analytical-rational thinking styles.

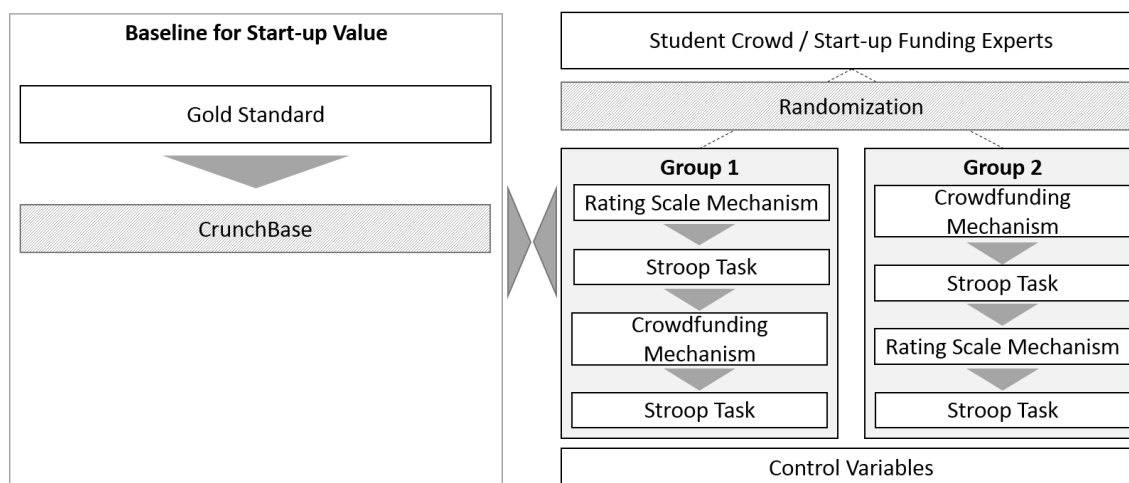


Figure 1: Overview Methodology

5 Expected Contribution

We intend to contribute to the current literature in several ways. First, we want to contribute to the general literature on IT-enabled openness by showing how the crowd can be used to address and support traditional organizational functions, such as a VCs evaluation of start-ups (Afuah and Tucci, 2012; Boudreau *et al.*, 2011; Franzoni and Sauermaun, 2014; Schlagwein and Bjørn-Andersen, 2014; Terwiesch and Ulrich, 2009). Second, we contribute to the literature on task representation, a topic that is still underresearched in the context of crowdsourcing (Dean *et al.*, 2006; Ozer, 2005; Riedl *et al.*, 2013; Soukhoroukova *et al.*, 2012). Thus, although research has shown that task representation plays a crucial role for successful IT-based crowdsourcing, there is still very little understanding of how different forms of task representations, in particular crowdfunding mechanisms, can support decision quality of crowd evaluations (Blohm *et al.*, 2016). Third, we aim to contribute towards a better understanding of behavioural decision making theories in the context of information systems by examining in more detail how IT-mediated task representations influence a users' cognitive decision making process. Finally, concerning our practical contribution, we provide practitioners with recommendations for how to represent IT-based evaluation mechanisms that allow them to achieve high-quality crowd evaluations.

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