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Financing Projects through Enterprise Crowdfunding: Understanding the Impact of Proposal Characteristics on Funding Success

by

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in: Proceedings of the 24th European Conference on Information Systems (ECIS), Istanbul, Türkei, June 2016, 50. Paper

WI-585

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FINANCING PROJECTS THROUGH ENTERPRISE CROWDFUNDING: UNDERSTANDING THE IMPACT OF PROPOSAL CHARACTERISTICS ON FUNDING SUCCESS

Research in Progress

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Abstract

Crowdfunding is a widespread approach for funding creative projects through an open call for support over the internet. Recently, companies have started to adopt this approach to engage employees into their innovation management processes, calling it enterprise crowdfunding. Employees publish own proposals for innovation projects on an internal crowdfunding site and invest company-endowed money on proposals of others. Although the underlying mechanism remains the same, enterprise crowdfunding exhibits distinct differences to crowdfunding on the internet such as employees investing corporate money rather than their own. With this study, we aim to contribute to a better understanding of funding success in enterprise crowdfunding. For this, we build on data from one of the hitherto largest enterprise crowdfunding implementations run at IBM in 2014. Employees submitted 204 ideas for internal mobile apps and IBM endowed four million US dollars to staff members. We investigate the role of idea and description characteristics for funding success. While idea characteristics such as novelty, relevance and feasibility do not explain proposal success, the degree of elaboration and the extent of follow-on costs do. Description characteristics affect the significant idea characteristics and, thus, indirectly funding success.

Keywords: Enterprise Crowdfunding, Benchmark, Empirical Study, Proposal Description, Idea Assessment, Innovation, Openness.

1 Introduction

Until recently, the scientific community called crowdfunding and related research ‘nascent’ (e.g. Ordanini et al., 2011; Belleflamme et al., 2014). Meanwhile, crowdfunding has become a widespread approach for funding creative projects across countries, cultures, and areas of application. One of the latest developments is the adoption and adaption of crowdfunding by governmental organizations and companies. For instance, municipal administrations have started to apply it as a mechanism for involving citizens in the funding of municipal projects (Sakamoto and Nakajima, 2013; Stiver et al., 2014). Moreover, larger companies have begun to make use of the internal application of crowdfunding, also called *enterprise crowdfunding* (ECF), for engaging employees more intensively in corporate innovation management (Muller et al., 2013, 2014; Feldmann et al., 2014). While crowdfunding on the internet has been addressed considerably by academic research, its use within organizations is seen as a great opportunity that is under-researched so far (Zuchowski et al., 2016).

Mollick (2014, p. 2) defines crowdfunding as "the efforts by entrepreneurial individuals and groups … to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet.” Thus, in enterprise crowdfunding employees propose innovation projects on an internal crowdfunding site and ask for contributions from colleagues. In opposition to external crowdfunding, these colleagues invest company money rather than their own. Mostly, proposals state a funding target and are only implemented if the target is met by the investments. Consequently, ECF contributes to a pooling and assessment of employees' ideas for innovation (Feldmann et al., 2014). From a company perspective, ECF is one out of many instruments for innovation management that can be orchestrated to support overarching strategic objectives. For this, understanding which innovation projects result from ECF is essential i.e., what the characteristics of proposals are that are funded by the internal crowd. We aim to contribute to this understanding.

Analysis of the proposal characteristics can take place on three levels. First, we can try to analyze the content of the ideas stated in the proposals e.g., who addresses the idea or what are its benefits. As this is highly idea-specific, it is difficult to study this level in an objective way. Hence, we focus on the subsequent two levels. Second, we can compare the ideas on a meta-level using measures for idea quality from literature such as *novelty or feasibility* (e.g. Riedl et al., 2010), subsequently referred to as idea characteristics. Finally, we can investigate characteristics that indicate how well a proposal, as the ideas' textual representations, is described. We summarize these as description characteristics. Extant crowdfunding research has studied the impact of several of these characteristics on funding success e.g., videos, pictures, or description length (e.g. Koch and Siering, 2015). We focus on characteristics found to be central to funding success in crowdfunding. Hence, we raise the research question *'Which idea and description characteristics affect funding success in enterprise crowdfunding?'*

For our study we build on data from 'ifundIT3,' one of the largest implementations of enterprise crowdfunding at IBM, where 2,000 employees were endowed with four million US dollars ($ from here on). ifundIT3 allowed proposing and funding of ideas for mobile apps that support IBMers' professional life. To evaluate the idea characteristics we engage a panel of IBM professionals, asking them to rate the idea quality of the individual proposals. Raters considered *novelty, relevance, feasibility, and elaboration* as taken from literature (Riedl et al., 2010) and the measure *self-containment* from practice, indicating to what extent a project can stand on its own without creating follow-on costs. We added an *overall* rating by experts. We then analyze the proposals submitted on the ECF site using coding as known from content analysis (Krippendorff, 2013) to identify the presence and quality of description characteristics. In a series of multivariate regressions, we relate the various characteristics to the proposals' funding success. Our results suggest a significant positive impact of *elaboration*, and a negative influence of *self-containment* on the funding of a proposal. Interestingly, we see only little direct influence of description characteristics on funding success. However, we see significant impact of several of these characteristics on the panel members' scores of *elaboration* and *self-containment* and, hence, indirect effects on funding success.

2 Related Work

Crowdfunding. In recent years, crowdfunding has been at the interest of various disciplines, such as finance (Belleflamme et al., 2014), entrepreneurship (Ahlers et al., 2015), experimental economics (Wash and Solomon, 2014; Solomon et al., 2015), human-computer interaction (Hui et al., 2014), and information systems (Zvilichovsky et al., 2013). The literature comprises of studies on different types of crowdfunding, such as lending or equity crowdfunding (Schwienbacher and Larralde, 2012; Ahlers et al., 2015), application in specific industries (Kappel, 2009), taxonomy development (Haas et al., 2014), literature reviews (Feller et al., 2013), motivations for participation (Gerber et al., 2012), and project support over time (Kuppuswamy and Bayus, 2013). Studying funding success in crowdfunding is covered from multiple perspectives. Regarding the role of geography for proposal funding, distance between proposers and investors seems to be of reduced relevance (Agrawal et al., 2011), while the location of the proposer is important (Mollick, 2014). Social media dynamics are recognized as influential (Greenberg et al., 2013; Etter et al., 2013; Mollick, 2014). Zvilichovsky et al. (2013) find positive effects of previous crowdfunding success and reciprocity in terms of proposers backing others' proposals. Xiao et al. (2014) add an emphasis on reward scheme design. Some (Greenberg et al., 2013; Mitra and Gilbert, 2014) point out the importance of linguistic attributes of proposals such as description length, sentiment, or word combinations. Basic proposal characteristics like funding target and duration show negative impact on funding success (e.g. Mollick, 2014). Several authors report on positive effects of the presence of videos, pictures, and proposer-investor interaction through updates or comments (Mollick, 2014; Mitra and Gilbert, 2014; Koch and Siering, 2015, Xu et al., 2014). Koch and Siering (2015) build upon media richness and reciprocity theory, integrating many of the previously mentioned impact factors. Mollick and Nanda (2015) apply established idea assessment criteria to compare funding success in crowdfunding with expert evaluations. As this is similar to our endeavor, we will come back to their results later.

Enterprise Crowdfunding. Concerning organization-internal crowdsourcing including enterprise crowdfunding, Zuchowski et al. (2016) emphasize its potential and point out the scarce presence of related research. Muller et al. (2013) report on the first implementation of enterprise crowdfunding at IBM Research. Their study exhibits promising results, e.g. high levels of participation, extensive inter-departmental collaboration, and the forming of new communities of interest. Subsequently, Muller et al. (2014) apply homophily theory and social identity theory to investigate identity facets with investment behavior and find a strong notion of community. Recently, Muller et al. (2016) find support for the impact of co-authoring and social ties on the funding success on enterprise crowdfunding. Feldmann et al. (2013, 2014) conceptually compare enterprise crowdfunding and two-sided markets used for idea assessment in organizations, and empirically analyze different styles of decision making in terms of time individuals take to make investment decisions in enterprise crowdfunding. Niemeyer et al. (2016) combine the concepts participatory budgeting and enterprise crowdfunding and present a pilot economic experiment to study this idea. To our knowledge, the impact of idea and description characteristics on funding success in ECF is unstudied.

Idea Assessment. Idea assessment refers to the evaluation and selection of ideas in innovation processes (Herstatt and Verworn, 2001; Schulze et al., 2012). The topic has been researched from multiple angles including assessment processes (e.g. Cooper, 2009), assessment boards (e.g. Riel et al., 2011; Alam and Perry, 2002), assessment approaches (e.g. Graefe and Armstrong, 2011; Soukhoroukova et al., 2012), IT-support for idea assessment (e.g. Westerski et al., 2011; Schulze et al., 2012), and assessment criteria, called idea rating scales (e.g. Cooper and De Brentani, 1984; Dean et al., 2006; Blohm et al., 2010). With regards to rating scales for analyzing collective intelligence in innovation communities (Riedl et al., 2010), Blohm et al. (2010) have conducted an extensive review on literature concerning creativity, group support systems and innovation research. They categorized the various authors' suggested metrics into the four dimensions *novelty*, *relevance*, *feasibility*, and *elaboration*. *Novelty* comprises of the attributes uniqueness, originality and paradigm-relatedness. *Relevance* stands for usefulness in the sense of tangible and vital impact of an idea and integrates financial potential, strategic importance and customer benefit. *Feasibility* combines the easiness of implementing an idea and the fit to the organization's strategy, capabilities, resources, and external image. *Elaboration* refers to the maturity of an idea and its completeness, level of detail and understandability. These dimensions have been used in several academic papers addressing the subject of idea assessment or comparing related approaches (Blohm et al., 2010, 2011; Mollick and Nanda, 2015; Riedl et al., 2010). We follow this and use these aspects to analyze the impact of idea characteristics on funding success in ECF.

3 Methodology and Dataset

This paper is an exploratory empirical study in the new field of enterprise crowdfunding. As such, we do not embark on hypothesis testing using an a priori set theory but rather follow Mollick (2014) who, based on Eisenhardt (1989), suggests generating data that can contribute to future theory building. Nevertheless, we use variables from related research on crowdfunding on the internet which are grounded in various theories, and add further variables based on own theoretical considerations. For our analysis, we compile data from three sources into a master table used for subsequent regression analysis (Figure 1, box 4): core data and descriptions of proposals submitted to a large enterprise crowdfunding implementation at IBM, expert ratings of idea characteristics of these proposals, and description characteristics derived from an initial qualitative coding process. We aim to contribute to a better understanding on how funding success relate to the idea and description characteristics.

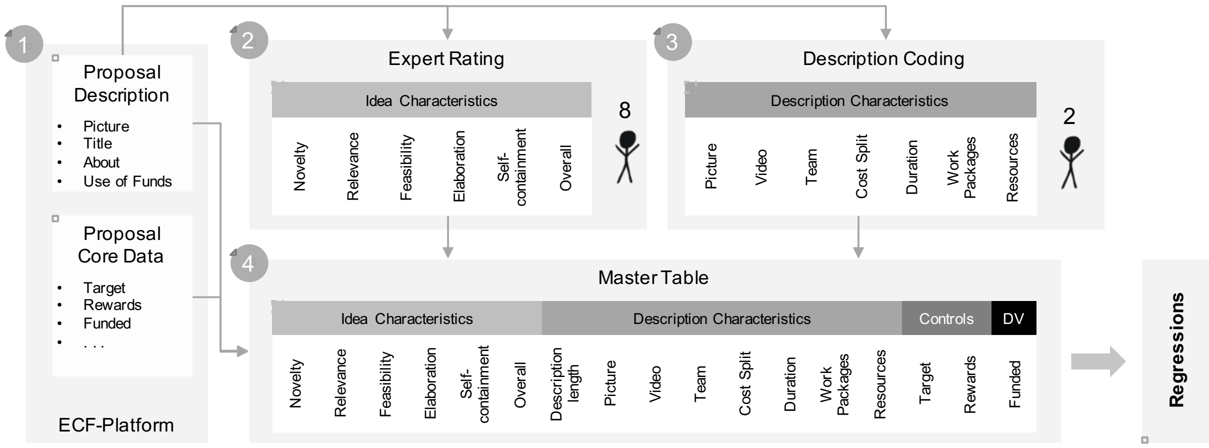

Figure 1. Compilation of the study's dataset from three sources

3.1 Dataset

In 2012, IBM Research started to explore enterprise crowdfunding. They conceptually outlined the procedures, implemented an ECF platform, and made it accessible over the company's intranet. Enterprise crowdfunding, as designed by IBM, exhibits similarities with crowdfunding on the internet. However, due to its novel nature and accounting for the much smaller audience, ECF is carried out in successive campaigns, denoted as trials, lasting several weeks. For every trial employees can sign up as participants. They are endowed with equal investment budgets and invited to submit proposals for their ideas to the vetting team that screens the proposals for legality, redundancy, and completeness. After publication on the ECF website, the proposals can be viewed, liked, shared, commented, and financially backed by the platform participants. Additionally, they can support an idea by volunteering personal work time. Once a proposal reaches its funding target, the corresponding budget is provided for its realization without any further management approval.

Following this concept, initial field studies were conducted at two US-based research centers in 2012 and 2013 (Muller et al., 2013). Subsequently, the IBM Office of CIO adopted ECF for their innovation management program, and named it ifundIT. They ran two successive trials within their unit of 5,500 members from 25 countries (Feldmann et al., 2014). In 2014, IBM dedicated four million dollars to conduct an IBM-wide trial open to employees from all business lines and geographies, subsequently called ifundIT3. We explore the resulting dataset that has not been used for other publications so far.

ifundIT3 ran in spring 2014 for six weeks and was the largest implementation of ECF so far, being potentially open to almost 380,000 IBM employees. Accounting for its size, the procedures were slightly supplemented. The trial centered on one guiding theme: ideas for mobile apps that support IBMers' professional life. To ensure practicality and a diverse sample of participants, registration was limited to 2,000 IBMers with representative sub-limits for geographies, countries, and business lines. Each accepted participant received a $2,000 investment budget. Notably, in support of faster and more professional implementation of funded proposals, IBM introduced a professional developer team to help realize them. Hence, successful proposers would engage in the development of their idea but would not be solely responsible for its implementation. Finally, a minimum funding target of $10,000 was requested for each proposal. Our dataset consists of the core data *target*, *funded* flag and presence of *rewards,* as well as central, static descriptions of the proposals from ifundIT3 (Figure 1, box 1). We use the *funded* flag as dependent variable and control for *target* in $1,000 and presence of *rewards* as suggested by literature (Mollick, 2014; Xiao et al., 2014).

3.2 Expert Rating of the Ideas

The second element of our dataset is an expert rating of the proposals submitted to ifundIT3 employing the consensual assessment technique (Amabile, 1996) which has previously been used for similar endeavors (e.g. Blohm et al., 2011; Kristensson et al., 2004). For this, we engaged eight professionals from IBM and asked them to rate the proposals along six scales.

Panel. As the theme of ifundIT3 was "mobile apps that support IBMers' professional life," we compiled a panel whose members fitted IBM's confidentiality requirements, knew the company specifics, were knowledgeable about mobile apps, and had a neutral position towards the proposals. Jointly with IBM we identified eight professionals who were not involved in ifundIT3 themselves. The panel did not know the funding success of proposals, were with the company for at least two years, aged mid to end twenty, were intensive users of mobile apps, and were mostly involved in projects around the development of electronic services (mobile or web based services) in the recent past.

Procedure. Throughout ifundIT3, 204 proposals were published. To keep project rating at a feasible and meaningful level, we agreed with the panel members to provide half of the proposals to each of them. For this, the 204 proposals were randomly split up into eight lists of 25 or 26 items. All lists were sorted by proposal ID in an (a) ascending and (b) descending order, and successively distributed to the experts in a way that each "a"-list (1a - 8a) was received by exactly two panelists, likewise for "b" lists. Also, the assignments were overlapping between the panelists to ensure maximum mix. Hence we controlled for attention biases and ensured that every proposal was rated by four experts.

Measures. We provided the panelists with the idea quality dimensions *novelty, relevance, feasibility*, and *elaboration* suggested by Blohm et al. (2010) as outlined above. Given the portfolio size of 204 proposals, we agreed with the panelists to rate the proposals along the four dimensions and use the corresponding sub-scales, e.g. "originality", "uniqueness", "paradigm-relatedness" for *novelty,* for orientation. We added the scale *self-containment* seen as particularly important for the software business by IBM, and an *overall* rating of the idea (Figure 1, box 2). In the ifundIT3 case *self-containment* indicates, whether a proposed app requires a lot of maintenance (low self-containment) or stands on its own. These six scales constitute our *idea characteristics*. For all scales, a 7-point Likert scale was used with "7" always being the most positive option. For our regression analysis, we use average rating per dimension per proposal.

3.3 Description Coding

Proposals in ifundIT3 comprise of a picture, a title, a main description ("About this project"), and information on the "Use of Funds." We build on this data to identify characteristics that signal description quality, generate respective variables via calculation or coding (Figure 1, box 3), and integrate them into our analysis of the impact of description characteristics on funding success.

Procedure. Coding is "a way of indexing or categorizing the text in order to establish a framework of thematic ideas about it" **(**Gibbs, 2007, p. 38). We provided all proposals to two coders, one author of this paper and a second, independent researcher knowledgeable in the area of crowdfunding. Both coders conducted "provisional coding" (Saldana, 2009) based on the predefined description characteristics outlined below, resulting in a set of binary or ordinal vectors. Both coding outcomes were matched and disagreements resolved in a joint review session.

Measures. Analyzing venture capitalists' decision-making, Chen et al. (2009, p. 202) introduce the concept of preparedness as a signal of quality to investors, i.e. a well-written business plan "reveals the time, effort, and resources the author has invested" which serves as a sign for quality. Mollick (2014) transfers this notion to crowdfunding and operationalizes preparedness by the presence of a video, timely updates, and spelling errors. We build on this and develop an own operationalization for preparedness based on our dataset and related crowdfunding literature.

Koch and Siering (2015) consolidate findings on proposal- and proposer-specifics that potentially contribute to funding success and conduct an empirical study. Their variables comprise of description length, number of pictures, presence of a video, funding target, project updates, prior proposal experience, and funding reciprocity. Furthermore, they control for the duration of the funding period, category assignment, and number of Facebook friends. Neither of their control variables were relevant to us. Different funding periods and a category scheme were not present in our ECF implementation, and the use of Facebook was not permitted for confidentiality reasons. Proposal experience was not significant in the study of Koch and Siering (2015). Moreover, our dataset did not include information on project updates and funding reciprocity. As we already use *target* as a control variable this left us with *description length, video, pictures,* which we all considered as indicators for preparedness.

First coding cycle. We calculated description length in 100 words and coded the *video* and *picture* variables in a first cycle. *Videos* (incl. demos) could be included in the description via a link to a separate page. We added a dummy variable indicating the presence of such a link. As the ECF site only allowed one cover picture, we introduced an ordinal variable *picture* with "1" for a placeholder pictogram without proposal context (e.g. company logo), "2" for a proposal related stock-photo, "3" for a self-produced, proposal related picture, e.g. mock-up, and "4" for a self-produced logo.

Second coding cycle. Inspired by screening the proposal descriptions at hand we identified further characteristics that may serve as signals for preparedness and added them to our coding scheme: We introduced a dummy variable *team* indicating whether proposers included any information about themselves in the description. Moreover, we found four attributes which indicate how well a proposer reflected on the planning of idea realization: (1) *cost split* stating whether the funding *target* was broken down in terms of time or money, (2) estimated *duration* for the project implementation, (3) *work packages* flagging whether components for the project realization were mentioned, and (4) *resources* referring to the naming of critical resources for the proposals realization.

4 Empirical Results

4.1 Descriptives

ifundIT3 took place in 2014 and lasted for 40 days. 2,000 employees signed up for the trial, submitted 1,019 proposals of which 204 were published and stayed online until the trial terminated. The difference between submitted and published proposals arises primarily from high rates of redundancies or already existing apps that were unknown to the proposer. We study the 204 published proposals. The proposals' funding targets ranged from \$10,000 to \$250,000. Description length varied from 46 words to 1,157 words. Proposals were submitted by employees from 23 countries. All registered participants were endowed with a budget of \$2,000 each. However, only 1,309 (65%) made use of their budget and invested in proposals on the platform. Overall, 42 proposals with funding targets between \$12,000 and \$150,000 were funded (20.6%). We aim to identify the proposal characteristics that made them succeed.

We engaged professionals from IBM in an expert rating of the 204 proposals. According to how we distributed our rating lists, each expert was asked to judge between 101 and 103 ideas along six rating scales leading to 4,896 possible individual ratings. Of these, we received 99.43% – in 28 cases the experts felt not able to make a numerical judgment. Average ratings of the the six scales are *novelty* (3.42), *relevance* (3.77), *feasibility* (4.07), *elaboration* (4.11), *self-containment* (3.98) and *overall* (3.64). An analysis of the histograms suggested a roughly normal distribution for all scales.

Two researchers coded the proposal descriptions as taken from the platform. The coding variables were of structural nature, and could therefore be evaluated fairly objectively. The inter-coder agreement was at 96.2%. According to the coding, 40.7% of proposals use stock photography as a key visual followed by self-created logos (28.4%), screenshots or diagrams (25.5%) and not content related pictograms (5.4%). Moreover, 10.3% of the proposals link to a *video*, 5.4% provide information on the *team*, 20.1% include a *cost split*, 12.3% add an implementation *duration*, 34.8% outline *work packages*, 20.6% mention required *resources*, and 13.7% offer *rewards* in return for an investment.

	Dependent variable	Funded		Elaboration	Self-containment
	Estimation	*Logistic*		*OLS*	*OLS*
		(1)	(2)	(3)	(4)
Idea Characteristics	Novelty	0.051	0.072		
	Relevance	-0.255	-0.206		
	Feasibility	-0.162	-0.146		
	Elaboration	1.007***	1.023***		
	Self-containment	-0.816**	-0.807**		
	Overall	0.097			
Description Characteristics	Description length	-0.042	-0.041	0.151***	-0.008
	Picture	0.408*	0.408*	0.099	0.079
	Video	0.128	0.120	0.415**	0.094
	Team	-0.962	-0.940	-0.664***	-0.219
	Cost split	0.797	0.786	0.286*	0.029
	Duration	-0.784	-0.786	-0.284	-0.456**
	Work packages	-0.412	-0.408	0.238*	-0.007
	Resources	0.262	0.265	0.083	0.135
Controls	Target	-0.029***	-0.028***	0.0002	-0.003***
	Rewards	0.826	0.810	0.266	-0.045
	Constant	-1.021	-1.090	3.225***	3.993***
	Observations	204	204	204	204
	Max. VIF	7.307	1.991	1.479	1.479
	R^2 (Nagelkerke R^2 for models 1 and 2)	0.285	0.285	0.253	0.097
	Adjusted R^2	0.224	0.228	0.214	0.050
	Log Likelihood	-83.210	-83.220		
	Akaike Inf. Crit.	200.420	198.441		
	Residual Std. Error (df = 193)			0.793	0.710
	F Statistic (df = 10; 193)			6.537***	2.067**

*Table 1. Regression results (Significance codes: `*´ 0.1; `**´ 0.05; `***´ 0.01).*

4.2 Regression Analyses

We perform a series of four multivariate regressions, as shown in Table 1. Two logistic regressions (models 1 and 2) analyze the relation of all variables in our dataset with funding success and two OLS regressions (models 3 and 4) help exploring the relation of description characteristics with the rating scales *elaboration* and *self-containment*. We limit this latter analysis to two out of six rating scales, as the logistic regressions suggest that only these two are significantly related to funding success. For all regressions, we calculated variance inflation factors to detect potential collinearity issues. Not surprisingly, the *overall* expert rating in regression (1) demonstrated high collinearity with the other expert ratings. Consequently, we adjusted regression model (2) by dropping the *overall* rating.

The logit regressions show a highly significant positive impact of *elaboration* on funding success (significance at the 1% level).[1] Counterintuitively, *self-containment* influences funding success negatively at a 5% level, suggesting that investors decide for proposals that result in follow-on effort by the company. No other rating scales indicate significant influence on funding success. Concerning the description characteristics, the funding *target* shows a negative direct impact (1% level), which is in line with other research (e.g. Koch and Siering, 2015). Regarding the further description characteristics, our analysis suggests a direct positive influence (10% level) only for the

[1] The statistics base on correlations, not causations. However, the proposals' descriptions are antecedents of both expert ratings and the crowd's decisions. The ratings are by design not influenced by funding success but it appears plausible that members of the crowd might have judged some of the same criteria for their decisions. Thus, we adopt a causal wording.

meaningfulness of *pictures*. The overall model fit (Nagelkerke R^2 of 0.285) appears reasonable given that we only focus on description characteristics and high-level ratings.

Subsequently, we analyze how description characteristics and controls relate to *elaboration* and *self-containment* and, thus, have an indirect effect on funding success. Corresponding OLS regressions show, that *description length* has highly significant positive impact on *elaboration*. Likewise, presence of *videos* (5% level), as well as cost split and *work packages* (10% level) positively influence elaboration. Surprisingly, the provision of information on the *team* negatively affects *elaboration* (1% level). A reason may be that proposer information is only a click away on the intranet. Mentioning the own background again in the central description may be perceived as an overemphasis. With R^2 of 0.253, the fit of model 3 is reasonable, again given the type of the explanatory variables. Looking at model 4, project *duration* (5% level) and funding *target* (1% level) have negative impact on *self-containment*. However, the overall R^2 for model 4 is only 0.097. The effect of *self-containment* on funding is less pronounced than the effect of *elaboration* on funding (models 1 and 2). Thus, the role of *self-containment* as mediator of the effect of proposal characteristics on funding success appears to be less pronounced than the role of *elaboration* as mediator.

5 Discussion and Further Research

Our exploratory statistical analysis of funding success in enterprise crowdfunding suggests that the company-internal crowd favors proposals are well elaborated i.e., have an extensive text *description length*, a meaningful *picture,* and a *video* as well as a *cost split* and *work packages* for the implementation phase. Hence, most of the description characteristics affect funding success either directly or indirectly. This supports the concept of signaling preparedness and confirms observations made in external crowdfunding. Counterintuitively, alluding to the *team* of proposers is not valued by the crowd in ECF. Likewise, the crowd seems to favor ideas that are not *self-contained* but require sustained effort including ideas having a substantial budget *target*. Surprisingly, the presence of rewards as well as the idea characteristics *novelty, feasibility*, and *relevance* show no significant effect on funding success. Exploring the reason for the lack of such a relationship will be subject to future research. In a similar study, Mollick and Nanda (2015) distinguish between proposals funded by both a crowd and an expert panel, as well as proposals selected only by experts or only the crowd. In the crowd-only case they also observe hardly any significant impact of idea characteristics on funding success.

Limitations of the present study include the focus on data from a single ECF trial in one company. In addition, our dataset includes only part of the information on proposers and proposals that is available on the company's intranet, in particular as ifundIT3 was not anonymous and proposers promoted their projects through various channels. For the description characteristics, we relied on manual coding which is subjective to a certain extent although done by two coders. Overall, confirmatory research should revisit our exploratory results and strengthen theorizing.

Our research opens various directions for future research: First, we plan to improve the study of the existing dataset by considering further signals for preparedness and conducting linguistic analysis of the proposals. Second, statistical modeling will move towards path analysis, include interactions among explanatory variables and moderators. Third, we will further analyze the idea characteristics of funded ideas and non-funded proposals. Initial analysis suggests that funded ideas have about the same average score for *novelty*, *feasibility*, and *relevance* as non-funded ideas, but a lower variance. Finally, we intend to continue the comparison of ECF results with those of expert boards. For our current study we observe little overlap between the two mechanisms. It will be interesting to explore further whether and when ECF is a valuable alternative to traditional decision making in innovation management.

Acknowledgements

We thank IBM for the fruitful co-operation. This research was in part carried out in the context of the Project Group Business and Information Systems Engineering of the Fraunhofer Institute for Applied Information Technology FIT.

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