Pascal Mücke

Signalling of early-stage startups on crowdinvestment platforms

Research on the presentation and typology of business models and their impact on project funding success

Master's Thesis

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Signalling of early-stage startups on crowdinvestment platforms – Research on the presentation and typology of business models and their impact on project funding success

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Abstract

Problem: Crowdinvesting as a relatively new funding form for early-stage startups in Germany bears fundamental opportunities for all participants. In this respect, startup entrepreneurs are facing the challenge to convince potential investors of their business idea to finally induce investments. Since crowdinvesting communication is limited to digital channels the knowledge about what information is relevant for making investment decisions is of crucial significance. Moreover, the "crowd" can be considered as a completely new investor class with specific characteristics and information requirements compared to traditional capital providers.

Purpose: The purpose of this research study is to evaluate the importance of business models as a potential unit of analysis in the crowdinvesting decision-making process. In this respect, the significance of selected signalling criteria that may serve as quality indicators for investors will be investigated. Entrepreneurs, crowdinvestors as well as respective platforms and thus the entire concept of crowdinvesting will benefit from a knowledge gain.

Theoretical Framework: The theoretical framework describes the characteristics of earlystage startups as well as the relevance of business models in the entrepreneurial context. In this light, different frameworks for the concept of business modelling will be presented and dismantled into relevant building blocks. Additionally, the concept of crowdinvesting is discussed in consideration of some special implications that can be explained via information economics and behavioural sciences such as information asymmetries and the occurrence of decision heuristics based on signalling criteria.

Method: In order to gain a broader understanding about the preferences in crowdinvesting a comprehensive empirical study of the German crowdinvesting market is conducted using a mixed-method approach. The research encompasses confirmatory und explorative components that are evaluated under application of different statistical methods.

Results and Implications: The research indicates that the business model concept is a suitable unit of analysis as it allows a differentiated view and enables new opportunities for the evaluation of crowdinvesting campaigns. In this context, it has been statistically proven that product-focused business models are funded more successfully than others. In addition, a positive correlation of selected signalling criteria could be detected. Finally, the results imply that startups should engage in offensive signalling to improve success of the crowdinvesting campaigns. However, there are also some indications in this context that the crowd makes decisions based on simplified evaluation processes and therefore applies binary decision heuristics.

Keywords: Crowdinvesting (equity-based crowdfunding), business model, startups, signalling

Table of Contents

Abstract		I
Table of C	ontents	III
List of Fig	ures	V
List of Tał	bles	VII
List of Ab	breviations	VII
1 Internal		v 11 1
I Introd	uction	I
1.1 P	roblem outline and relevance	2
1.2 T	arget and approach	7
2 Defin	itions and theoretical framework	10
2.1 C	considerations about early-stage startups	10
2.1.1	Characteristics	
2.1.2	Startup funding cycle and the role of crowdinvesting	13
2.1.3	Reasons for startup failure	19
2.1.4	Why startup success is hard to predict	
2.2 R	elevance of Business Models in the entrepreneurial context	24
2.2.1	Definitions and origin of business modelling	
2.2.2	Business model ontologies	
2.2.3	Business model typologies	
2.2.4	Business models and startup innovation	4
2.3 C	Prowdinvesting	8
2.3.1	Concepts and classifications	8
2.3.2	Crowdinvesting process	12
2.3.3	Crowdinvestor profile	14
2.4 II	nformation economics in crowdinvesting	19
2.4.1	Principal agent theory	20
2.4.2	Signalling and decision heuristics in crowdinvesting	25
3 Empir	rical Study	
3.1 N	1ethodology	

	3.2	Definition of hypotheses	32
	3.3	Research model and definition of variables	37
	3.4	Sample and data collection	40
	3.5	Qualitative considerations	42
4	Res	ults of empirical study	45
	4.1	Quantitative Market Research	45
	4.1.	1 Results from descriptive statistics	45
	4.1.	2 Results from statistical analysis	54
	4.2	Discussion	71
	4.3	Limitations	76
5	Con	clusion and Outlook	78
	5.1	Conclusion	78
	5.2	Implications for further research	81
6	List	of References	84
A	ppendi	х	97

List of Figures

Figure 1 - Funding volume of crowdinvesting projects in Germany (2011- 2017)	2
Figure 2 - Crowdfunding Barometer 2017	4
Figure 3 - PwC survey results "convincing potential investors"	6
Figure 4 - Illustration of Research Objective	8
Figure 5 - Comparison ROI development based on growth rate	11
Figure 6 - Startup founding process	12
Figure 7 - Startup development phases	14
Figure 8 - Global and German venture financing by stage 2010-2016	15
Figure 9 - Utilization of funding sources of German startups in 2014-2017	17
Figure 10 - Investment status of German crowdinvesting startups 2016	18
Figure 11 - Top 20 reasons for startup failure	19
Figure 12 - Clustered reasons for startup failure	20
Figure 13 - Levels of uncertainty applied to startup development	22
Figure 14 - Causal Thinking vs. Effectuation	24
Figure 15 - Theory of Business by Peter Drucker	27
Figure 16 - Business model structure based on thoughts by Joan Magretta	
Figure 17 - Business Model Canvas	
Figure 18 - St. Galler Magic Triangle	
Figure 19 - Increasing complexity of business model typologies	1
Figure 20 - Business Model Archetypes by Cabage & Zhang	2
Figure 21 - Relationship between innovation and value proposition	6
Figure 22 - Milestones in the digital transformation	9
Figure 23 - Key participation models in crowdinvesting	11
Figure 24 - Complexity of crowdfunding concepts	11
Figure 25 - Stakeholders in crowdinvesting	12
Figure 26 - The equity-crowdfunding process	14
Figure 27 - Motivation for decision-making in crowdinvesting	17
Figure 28 - Investor types by \emptyset investment and number of investments	
Figure 29 - Agency conflicts in crowdinvesting	21
Figure 30 - Resulting problems in crowdinvesting caused by information asymmetries	s22
Figure 31 - Signalling in crowdinvesting	25
Figure 32 - Structure of research study	
Figure 33 - Hypotheses embedded into BMC ontology	

Figure 34 - Research questions, hypothesis and determinants within the research model39
Figure 35 - Market shares of platforms in Germany in 2016 by funding volume40
Figure 36 - Distribution of considered projects within the collected dataset ($N = 151$)
Figure 37 - Early-stage startup funding campaigns from 2011 to 2017
Figure 38 - Number of individual investments by crowdinvestors
Figure 39 - Collected investment capital for the segment "startups" from 2011 to 2017 48
Figure 40 - Distribution of funding campaigns by business model archetypes ($N = 151$)49
Figure 41 - Distribution of campaigns by funding level clusters
Figure 42 - Summary of regression model QTY_CROWDINV59
Figure 43 - Summary of regression model F_AVG_AMOUNT60
Figure 44 - ANOVA interval plot by collected funding volume (F_COLLECTED)63
Figure 45 - ANOVA interval plot by collected funding volume (QTY_CROWDINV)64
Figure 46 - ANOVA interval plot by collected funding volume (F_AVG_AMOUNT)65
Figure 47 - ANOVA results by success variables vs. DUM_TEAM66
Figure 48 - ANOVA results by success variables vs. DUM_TR_REC67
Figure 49 - ANOVA results by success variables vs. DUM_BA68
Figure 50 - ANOVA results by success variables vs. DUM_PATENT69
Figure 51 - ANOVA results by success variables vs. DUM_REVENUE70
Figure 52 - ANOVA results by success variables vs. DUM_AWARDS71

List of Tables

Table 1 - Selected business model definitions	29
Table 2 - Business model building blocks by Osterwalder	31
Table 3 - Case Study Grin Verlag GmbH	6
Table 4 - Case Study Amazon EC2	6
Table 5 - Case Study Delivery Hero	7
Table 6 - Average characteristics of crowdinvestors on German platforms	15
Table 7 - Key characteristics of crowdinvestors, business angels and venture capitalists	16
Table 8 - Proposed assessment criteria for investors by CONDA	28
Table 9 - Selected research studies that deal with behaviour in crowdfunding	29
Table 10 - Dependent variables related to Funding Success	37
Table 11 - Independent variables of empirical study	39
Table 12 - Top German crowdinvesting platforms	41
Table 13 - Information building blocks on Platforms	43
Table 14 - Descriptive statistics for dependent variables (n=151)	50
Table 15 - Descriptive statistics for independent variables (n=151)	52
Table 16 - Mean value comparison between successful and unsuccessful campaigns	53
Table 17 - Interpretation of correlation coefficients by Cohen	55
Table 18 - Results from correlation analysis	56
Table 19 - Summary of expected means of 95% confidence interval from ANOVA	73

List of Abbreviations

- ANOVA Analysis of Variance
- BMC Business Model Canvas
- IP Intellectual Property
- KPI Key Performance Indicator
- ROI Return on Investment
- USP Unique Value Proposition

1 Introduction

"I think the most important impact (of my research) is the recognition that economic agents are human and economic models have to incorporate that."¹

Within the past years the market environment and therefore also opportunities and challenges for innovative startups have altered fundamentally. In times of scarce venture capital the access to adequate funding capital is a prerequisite and catalyst for realizing the fast growth aspirations of startup companies. However, the range of possibilities that entrepreneurs can utilize to fund and develop their businesses has expanded due to new emerging technologies.

Crowdfunding in its various forms is a growing phenomenon around the world that can be considered as a vital part of the digital structure change and is frequently mentioned in one breath with buzzwords like *Crowd Sourcing* or *FinTech.*² As an alternative to traditional funding methods crowdinvesting as a specific form of crowdfunding (equity-based crowdfunding) is on the advance. In this respect, crowdinvesting has evolved to a versatile alternative for startup entrepreneurs. On the other side it poses a new investment opportunity for a broader audience. With the advent of internet based crowdfunding platforms the equity participation in startups was no longer restricted to institutional investors like business angels or venture capitalists but became also available to private investors. In line with this process, crowdinvesting has evolved to a diversified market on which different online platforms serve as intermediaries between startup companies and private crowdinvestors. Consequently, startup entrepreneurs with promising business ideas became a valuable asset as an alternative investors in the current low-interest environment.

However, equity-based crowdfunding is a complex process especially from a communication standpoint as the complete information exchange and dealflow is online. Moreover, crowdinvestors can be considered as a completely new stakeholder class whose information requirements for decision-making are not entirely explored in line with the progressing

¹ Richard H. Thaler, professor at the University of Chicago Booth School of Business, quoted in a call broadcast at the Nobel news conference. He awarded the Nobel Prize in 2017 for his contributions to the research field of behavioural economics and their impact on economic decision-making

² cf. (Dapp, 2014a, p. 1)

dissemination of crowdinvesting. This development raises the question how startup founders can present and illustrate their business ideas in a way that attracts potential crowdinvestors to ultimately boost investment transactions. The present study intends to shed light on the relevance and impact of the presentation and content of business models as a decision-making factor for crowdinvestors and other related stakeholders.

1.1 Problem outline and relevance

Crowdinvesting (equity-based crowdfunding) has been measurably perceptible on the German market since 2011 as a financing alternative for young startup companies. Even today crowdinvesting can still be considered as an emerging market that has been growing constantly over the past years. Considering the current market development, the data clearly show a constant growth in terms of both funding volume and the number of successfully financed projects. This significant increase testifies growing market acceptance of this form of alternative financing. Although the real estate segment can currently be considered as the major growth driver in crowdinvesting from a holistic perspective, the segment of startup financing also gained an impelling growth push of 65% in 2017.³ Figure 1 illustrates the monetary development between 2011 and 2017 in Germany.



Figure 1 - Funding volume of crowdinvesting projects in Germany (2011-2017)⁴

³ cf. (www.crowdinvest.de, 2017, p. 3)

⁴ Own illustration based on (www.crowdinvest.de, 2017, p. 2)

The emerging opportunities for startup entrepreneurs as well as for private investors are manifold and bear a massive economical potential as an alternative concept to classical funding types like bank loans or venture capital funds. In the meantime, Germany can be considered as the third largest market in Europe for alternative financing besides UK and France.⁵ In this respect, recent studies show that the current market penetration of crowdinvesting covers only around 4% of the addressable market. Consequently, the growth prospects of this partial segment are very positive.⁶ Numerous studies have already dealt with economics of crowdfunding.⁷ Nevertheless, many aspects in terms of function and mode of operation, opportunities, risks, but also control or regulation have not yet been sufficiently researched due to a lack of experience, statistics and history.⁸

From financial industry's point of view crowdfunding is not regarded as a hype, but as a trendy movement that is still in its infancy. However, the overall market has also been subject to significant changes. With the introduction of the "Kleinanlegerschutzgesetz" in 2015 a legal framework for crowdfunding was ultimately defined. Within the scope of a financing limit of up to 2.5 million Euro, issuers and platforms were exempted from expensive documentation and auditing obligations.⁹ This framework enabled a clear legal leeway for crowdinvesting in Germany but also encountered opposition as industry representatives still considered it as too restrictive.¹⁰ Apart from that, there has also been a continuous professionalization on the side of the provider platforms. The appearance, terms of the contract and investor models have developed continuously over the past years.

As a social phenomenon crowdinvesting is also critically followed in the media. Due to several prominent insolvencies, such as the famous startup *Protonet* in February 2017, the concept of crowdinvesting has already been judged to have failed fundamentally.¹¹ In this context various explanatory approaches are discussed among experts. The arguments cited in this regard are the hitherto unknown risk level of this financing class, the contact design with

⁵ cf. (Ziegler, et al., 2018, p. 16)

⁶ cf. (Dorfleitner, et al., 2016)

⁷ Important contributions were published by (Hornuf & Schwienbacher, 2014) or (Belleflamme, et al., 2013)

⁸ cf. (Dapp, 2014b, p. 13)

⁹ cf. (Bundesministerium der Finanzen, 2015)

¹⁰ cf. (Dorfleitner, et al., 2016, p. 31)

¹¹ cf. (Wirminghaus, 2017)