

# Middlesex University Research Repository

An open access repository of

Middlesex University research

<http://eprints.mdx.ac.uk>

Lehner, Othmar M. ORCID: <https://orcid.org/0000-0002-3317-9604> and Harrer, Theresia (2019) Crowdfunding revisited: a neo-institutional field-perspective. *Venture Capital: an International Journal of Entrepreneurial Finance*, 21 (1) . pp. 75-96. ISSN 1369-1066 [Article] (doi:10.1080/13691066.2019.1560884)

Final accepted version (with author's formatting)

This version is available at: <https://eprints.mdx.ac.uk/28901/>

## Copyright:

Middlesex University Research Repository makes the University's research available electronically.

Copyright and moral rights to this work are retained by the author and/or other copyright owners unless otherwise stated. The work is supplied on the understanding that any use for commercial gain is strictly forbidden. A copy may be downloaded for personal, non-commercial, research or study without prior permission and without charge.

Works, including theses and research projects, may not be reproduced in any format or medium, or extensive quotations taken from them, or their content changed in any way, without first obtaining permission in writing from the copyright holder(s). They may not be sold or exploited commercially in any format or medium without the prior written permission of the copyright holder(s).

Full bibliographic details must be given when referring to, or quoting from full items including the author's name, the title of the work, publication details where relevant (place, publisher, date), pagination, and for theses or dissertations the awarding institution, the degree type awarded, and the date of the award.

If you believe that any material held in the repository infringes copyright law, please contact the Repository Team at Middlesex University via the following email address:

[eprints@mdx.ac.uk](mailto:eprints@mdx.ac.uk)

The item will be removed from the repository while any claim is being investigated.

See also repository copyright: re-use policy: <http://eprints.mdx.ac.uk/policies.html#copy>

# **CROWDFUNDING REVISITED: TAKING STOCK AND MOVING FORWARD FROM A NEO-INSTITUTIONAL FIELD-PERSPECTIVE**

**Othmar M Lehner<sup>1</sup> and Theresia Harrer<sup>2</sup>**

<sup>1</sup> Said Business School, University of Oxford

<sup>2</sup> Middlesex University, London

## **Abstract**

Crowdfunding, which relies on the aggregated financial power of the many and non-institutionalised individuals, who pledge small amounts is seen in the literature as a particularly well-suited form of entrepreneurial finance. A reason for this may be that the investment decisions are more based on the value propositions of a venture than on purely financial factors. Yet, the communication and translation of the value propositions of a venture into the various cultural and regulatory contexts that the crowd is embedded in needs specialised services and joint efforts. These services are enabled by so-called Crowdfunding Platforms (CFPs) as they provide the tools and services necessary. However, they also influence and potentially limit the field through their actions. Applying an institutional field-perspective in order to gain more holistic insights on the interplay between structure and agents and following our seminal 2013 article in *Venture Capital*, we revise the originally proposed model based on an extensive update of the literature and, because of the high dynamics of the field we also include insights from additional new empirical cases to triangulate the scholarly insights. We finally develop five propositions that enable us to enhance theory on CF on an institutional field-level that includes an apt conceptualization of the interconnectedness between structure, actors and their activities, as well as positions and links, with CFPs as powerful central actors.

**Keywords:** Crowdfunding, Platforms, Ventures, Innovation, Institutional Theory

<sup>1</sup> Corresponding author, Park End Street, OX1 1 HP, Oxford, M: [othmar.lehner@sbs.ox.ac.uk](mailto:othmar.lehner@sbs.ox.ac.uk)

## Introduction

Crowdfunding (CF) denominates a set of innovative financing options for ventures, which opens novel investment opportunities for corporate and private investors and provides alternative financing routes. The heterogeneous “crowd” funds either projects or whole ventures through the aggregation of small investments from a large number of individual investors (Belleflamme, Lambert, & Schwienbacher, 2014; Bruton, Khavul, Siegel, & Wright, 2015; Mollick, 2014). The supplied capital types range from donations via a simple pre-financing of products, to loans, to full scale equity investments; each type differing in implied regimes, risks and rewards. Compared to traditional instruments and actions on regulated capital markets, crowdfunding is limited in size and thus less regulated.

The Crowd itself is still a largely unknown phenomenon when it comes to the inner decision-making processes and motivations (Belleflamme et al., 2014; Cholakova & Clarysse, 2015; Josefy, Dean, Albert, & Fitza, 2016; Stemler, 2013). Members of the crowd are typically globally dispersed and use online communication platforms and social media to exchange ideas and inform themselves to build collective knowledge - the so called “wisdom of the crowd” - (Lehner, 2014). Such collective knowledge can be bundled and fostered by crowdfunding platforms (CFP) which serve as brokers between the capital seeking ventures and the crowd, but also more and more to institutional investors and markets (Lehner, Grabmann, & Ennsgraber, 2015; Mollick, 2014). These platforms typically offer a range of services, from financial brokerage to marketing and consultancy for scaling and structured financing. They typically generate their revenue streams by taking a percentage of the transaction volume (Colombo, Franzoni, & Rossi-Lamastra, 2015; Lin & Shih, 2016; Löher, 2016).

So far, empirical evidence in CF is mostly either provided via reductionist approaches, often linking a dependent variable - typically some form of proxy for success - to a small subset of attributes of a CF campaign (Cholakova & Clarysse, 2015; Colombo et al., 2015), or via case studies that often focus on single actors, looking for example at the inner workings of ventures and their interplay with the crowd (Lehner et al., 2015). Recently, based on an editorial and call by Short, Ketchen, McKenny, Allison, and Ireland (2017), McKenny, Allison, Ketchen, Short, and Ireland (2017) structure the research field of crowdfunding and provide avenues to move forward by providing insights into the role and value of various theories in CF research, potential future research questions, and the most influential research articles in the field.

Few articles look at crowdfunding from a more holistic perspective by including all actors and activities, positions and links; apart from early works for example by Lin and Shih (2016) and by Lehner (2013) in the realm of crowdfunding for social ventures. Yet because the communication and translation of the value propositions of a CF venture into the various cultural and regulatory contexts that the crowd is embedded in needs specialised services and joint efforts such a holistic perspective may be very much needed to fully understand the processes in crowdfunding. Such services are provided by so-called Crowdfunding Platforms (CFPs) by offering tools for an active collaboration of many actors in the field, including business angels and venture capital providers.

Following a neo-institutional perspective, the role of the CF platforms contributing to the overall structure in terms of standards, norms and traditions, but also acting as centralized, powerful actors who potentially influence the whole system via their various service offerings and by controlling the resource flows has remained largely unaddressed so far. Early insights are provided for example by Maier (2016), who looks at the necessity for platforms to initiate a double switching behaviour in borrowers and investors and by Haas, Blohm, and Leimeister (2014) who provide a typology of platforms. Belleflamme, Omrani, and Peitz (2015) finally

explore the economic forces at play that influence the design of these platforms from an organisational level.

Acknowledging the above thoughts, this article thus sets out to first, provide an extensive update on the insights from the recent literature since our 2013 article, and second, to empirically triangulate the findings from a field-perspective on crowdfunding embedded in neo-institutional theory (Dacin, Goodstein, & Scott, 2002; Scott, 2008).

## **State of the Art in CF Research**

### *Typologies of CF*

Crowdfunding (CF) typologies can be divided into four main blocks: donation-, reward-, lending- and equity-based CF. Whereas donation-based CF just offers non-tangible rewards such as reputation, the so-called reward-based CF delivers products or services that have been created through the successful pre-financing of the first stages leading to a market ready product. Lending based CF offers either the repayment of the principal with interest or sometimes a combination with a finished product. Equity based CF finally distinguishes between general and accredited investors (Stemler, 2013), allowing various approaches from simple profit-sharing to equity and hybrid, bond-like shares.

Within this spectrum, reward-based crowdfunding seems to be the most complex in terms of understanding and might require novel research approaches, borrowing from both, socio-cognitive theory as well as from more functionalist institutional approaches to truly understand the interplay between the crowd and the ventures. Other crowdfunding types can perhaps be more easily compared to either traditional, albeit less regulated venture investments or to philanthropy in the case of donation-based CF. Thus, well-established and more robust research lenses may offer appropriate avenues to explain their inner workings and examine their high potential as source for entrepreneurial finance.

Suggesting a Bricolage lens on equity-based crowdfunding for example, on entrepreneurs within innovative, consumer-focused, early stage ventures, Brown, Mawson, Rowe, and Mason (2018) see that these entrepreneurs are attracted by the ability to obtain finance quickly without giving up too much autonomy and intangible benefits as it would be the case with VC funds. Other inquires, such as from Walthoff-Borm, Schwienbacher, and Vanacker (2018) show that firms listed on equity CF platforms are often less profitable, display higher debt-levels and have rather more intangible assets than non-listed ventures. Latest research on new forms of CF, offering equity-like rewards such as abstract and tradeable “tokens” via so called Initial Coin Offerings (ICOs) examines how this allows funders to create some form of a secondary market (Adhami, Giudici, & Martinazzi, 2018), which helps with the later financial evaluation of the venture compared to the rather illiquid original types of equity based crowdfunding. The developments of this form however are still very much in flux and neither the technology – often using highly secure, distributed, internet-based ledgers (Blockchains) - nor the regulation concerning the created capital markets and applicable laws can be seen as anywhere near a stable process model (Adhami et al., 2018).

While the above approaches address a single typology with little regard to others, Paschen (2016) provides an overview of crowdfunding-typologies, identifies a potential nexus of these with the value-creation strategies and business models of ventures in different stages and, consequently, derives recommendations for the optimum type for each stage. It is thus necessary for the venture to align its business model with the chosen funding strategy and crowdfunding type (Paschen, 2016). An optimal fit in this alignment appears to be vital for ventures to ultimately deliver the value proposition and scale accordingly.

Crowdfunding Platforms (CFPs) also differentiate in their business models per crowdfunding types and introduce variations such as thresholds and maximum limit concepts to address different viability concerns from investors. As a consequence, they often attract very different ventures. Looking at the motivational factors for investors, Cholakova and Clarysse (2015) for example, provide insight into the influence of financial and non-financial motivational factors on the decision-making of investors. Their findings indicate that in reward-based crowdfunding projects investors are more intrinsically motivated, while in equity-based crowdfunding a project's extrinsic factors such as available financial data matter more. Moreover, Belleflamme et al. (2014) find that investors tend to opt for reward-based crowdfunding structures if the required investment amount is relatively small compared to the market size. In contrast, they prefer profit-sharing if the investment amount is bigger. Hence, the choice of type and platform seems to be of high importance for ventures and investors alike and it might be the first landmark decision to crowdfunding success.

### ***Success Factors, Social Capital, Geographical Fit and Cultural Distance***

When looking at the dynamics of success and failure of CF, the role of personal networks to sub-sequentially tap the crowd can be seen as focal (Mollick, 2014). Decomposing the somewhat generic, yet excessively applied term "crowd", numerous authors thus look at the role of social capital and community processes in CF campaigns. Lehner (2014) finds evidence that CF success ultimately depends on how the interaction between different crowd tiers transforms entrepreneurial social capital (SC) into economic capital (EC) by applying a Bordieuan lens. In this transformation, he examines how these interactions and transformations are strongly moderated by the progressively built cultural and symbolic capital.

Colombo et al. (2015) corroborates the above findings and ascertains that the internal SC of the whole crowdfunding community is indeed affecting its success using a large-scale quantitative setting. They support early findings of Lehner (2014), and state that actions that take place in the early-stages such as enlisting a critical number of backers and the resulting early capital flow serve as accelerators for the previously mentioned transformation process.

Besides the power of social capital, new inquiries also look at the increasing importance of positive psychological capital (Anglin et al., 2018a; Anglin, Wolfe, Short, McKenny, & Pidduck, 2018b) and find that entrepreneurs conveying positive psychological capital, such as hope, optimism, resilience and confidence display a better funding perspective. What is more, they conclude that human capital seems to moderate this this relationship while social capital does not.

In addition, bringing in context-specificity, various scholars also come up with context and country-specific insights on SC. As one example Zheng, Li, Wu, and Xu (2014) compare China and the US by looking at three dimensions of SC and find differences in the importance of these dimensions between China and the US, further opening research perspectives on cultural differences in the targeted crowdfunding community.

Following this thought, the quality of signals channelled and transformed through SC and the perceived risk appears highly context-specific and therefore cultural and geographical locality must be taken into consideration when it comes to developing a successful CF strategy. Yet very little guiding literature exists on how to identify and handle these specific effects.

Distance, as outlined before, can also be overcome by using signals to communicate intentionally to various networks and activate social capital. Local and distant founders exhibit different motivations based on the transformation of context and culture specific values (Agrawal, Catalini, & Goldfarb, 2015) and CFPs often help overcome this cultural and geographical distance. Especially the community context remains largely unaddressed so far and Josefy et al. (2016) thus call for a further integration of community and cultural constructs

into models of venture funding. Ryu and Kim (2016) find that from the perspective of signalling theory specific start-up cluster areas in which the ventures can be located, are acting as catalysts for crowdfunded ventures to get additional funding. Clusters can be understood to cover geographical and physical locations in which ventures are embedded and provide a natural entrepreneurial system. However, when it comes to the global dimension of crowdfunding, such cluster-based systems are too narrow and crowdfunding platforms act as structural hole spanners and gatekeepers (Burt, 2004) in transporting and transforming the ideas and value propositions to other contexts.

Providing additional evidence of the high importance of crowdfunding platforms, Jääskeläinen and Maula (2014) point out that crowdfunding platforms can address issues of cultural distance and potential biases by transforming signals and information into a community-relevant cultural context, thus creating the impression of a virtual locality that in return fosters the crucial transformation of social into economic capital (see Lehner 2014 above)

Addressing this communication, authors such as Moss, Neubaum, and Meyskens (2015) adapt and apply signalling theory and state that the quality and quantity of the displayed information about the characteristics and behavioural intentions of the venture have a significant effect on the perceived risk. More recently, and starting from a different angle, Kromidha and Robson (2016) find that a higher personal identification of entrepreneurs with their ventures in social media representations acts as a strong signal towards the crowd. Allison, Davis, Short, and Webb (2015) further address the cognitive evaluation theory by providing insights into how linguistic cues (meaning involuntary signals) affect crowd motivations and thus how the business-model of a venture is accepted and funded.

Corroborating these findings, Cardon, Mittens, and Sudek (2016) find in their work that enthusiasm, preparedness and commitment of entrepreneurs are important motivational cues based on which early-stage-investors decide on. This goes well with insights from Brinckmann and Kim (2015), who find that highly self-efficacious and persevering entrepreneurs tend to strive for outside financing and prepare accordingly.

A longitudinal perspective on the dynamics of project support over time has been applied by Kuppuswamy and Bayus (2017), when they examine the factors moderating the effects of goal proximity. They find that the predicted positive effect of goal proximity in a threshold CF model is accentuated by small target goals and limited early support. Their findings help understand timing effects on the crowd motivation. Another interesting inquiry into how subsequent funding can be achieved based on high funding sums in the first rounds and through patents of the CF seeking venture is examined by Rassenfosse and Fischer (2016); Roma, Messeni Petruzzelli, and Perrone (2017)

What is more, Buttice, Colombo, and Wright (2017) look at how serial entrepreneurial crowdfunding acts as a strong signal to enhance trust and thus ultimately increases the chances of success. Skirnevskiy, Bendig, and Brettel (2017) find additional evidence how the track record of an entrepreneur can develop internal social capital and how this can be converted into external resources. Such signals also matter in subsequent stages when it comes to attracting venture capital (VC) and bank funding. However it is important to accept that the signals that are relevant in the first crowdfunding rounds may not match the investment criteria of traditional VC funds or business angels (Lukkarinen, Teich, Wallenius, & Wallenius, 2016). Despite this, Drover, Wood, and Zacharakis (2017) see that the heterogeneous characteristics of angels and the crowd can produce “highly influential certification effects” on the venture capitalist’s screening decisions. Courtney, Dutta, and Li (2017) also address the relevance of external endorsements and find that third-party endorsements typically validate and complement start-up originated signals, while some start-up originated signals may even offset each other’s effects. Zvilichovsky, Inbar, and Barzilay (2013) use the platform

Kickstarter to look at how project owners increase the success of their campaigns through backing and contributing to the projects of others. True to the co-creation, sharing-economy “Zeitgeist”, they find that such out-of-project actions can be a rewarding strategy due to direct and indirect reciprocity in reception and actual funding.

Summing up success factors, Lagazio and Querci (2018) highlight the multi-sided nature of CF campaign successes. They outline that altruism, fixed- and small-sized projects and large entrepreneurial teams are indicators of a successful funding. Alongside these characteristics, a strong focus on the tiers of social capital and carefully crafted linguistic components throughout the communication is crucial to transform social capital into economic capital. Adding to this, Xu, Zheng, Xu, and Wang (2016) use the QCA method to identify paths to sponsor satisfaction from an asymmetrical perspective in CF and see that timeliness, product quality and novelty, sponsor participation through interaction and entrepreneurial activeness in these processes can be seen as antecedents for a positive outcome.

### ***Information and Perception***

Venture specific human capital, social capital, intellectual capital and perceived uncertainty can be seen as critical dimensions in order to predict CF success (Ahlers, Cumming, Günther, & Schweizer, 2015). Identifying an important phenomenon specific to CF, Vismara (2016) for example looks at how “information cascades”, signifying the link of external public profiles of investors to the information available on the platforms, work in reducing uncertainty and perceived risk. This fits well with earlier explanations by Reuber and Fischer (2011), who discuss the importance of online technological capabilities and online reputation in internet enabled markets in general and see that these work as moderators in the pursuit of opportunities. Unfortunately, little has been written so far about the link between the quality and quantity of such information and the success in reducing information asymmetries.

Bi, Liu, and Usman (2017) look from a country specific context when they apply an elaboration likelihood model to examine signals of quality and electronic word of mouth, including word and video counts from a Chinese CF platform. They identify a difference in the information adequacy (central or peripheral route information) between science & technology and entertainment & art projects. Davis, Hmieleski, Webb, and Coombs (2017) identify the correlation between perceived product creativity and passion of the entrepreneurs in the funders’ eyes and stress the importance of research into affective events theory and especially expectation alignment between funders and founders. Earlier, Cardon et al. (2016) already find that the relationship between enthusiasm in pitches and evaluations of funding potential vary depending on the type of commitment considered. While the necessity of alignment has been identified in both modern crowdfunding and traditional investment pitches, there are subtle differences between these two. By looking at the linguistic style in crowdfunding pitches, Parhankangas and Renko (2017) provide an early explanation for such differences and find for example that social entrepreneurs who want to tap the crowd for funding need to additionally compensate for their incomplete social categorisation in their CF pitches. Consequently, based on their higher inherent liability of newness in the eyes of the crowd they need to rely more extensively on the linguistic style to attract funding (Parhankangas & Renko, 2017). These insights are also highly important especially when it comes to structured finance including traditional BA and VCs in later funding rounds of CF ventures, as the CF pitches later need to be individually adapted for each target audience, concerning rhetoric, signalling and of content.

More insights on persuasion in crowdfunding pitches and on the role of internal and external cues in entrepreneurial narratives from a microlending perspective have been examined by Allison et al. (2015); Allison, Davis, Webb, and Short (2017). They see that additionally transported altruistic values of helping others are often followed by a greater

investment motivation compared to the perception of only a potential successful business opportunity. In addition, they find that external cues such as group identity are amongst the strongest influencing factors of crowdfunding success. This aligns with Calic and Mosakowski (2016) who see that a venture's sustainability orientation, as for example in social entrepreneurship, will enhance its fundraising capability.

It thus seems apt to apply more interpretive lenses on crowdfunding, in order to understand its full potential. Following such thoughts Frydrych, Bock, Kinder, and Koeck (2014) explore how legitimacy is created through these specifically targeted discursive elements in reward-based crowdfunding. Especially a strong underlying discourse of sustainability in combination with the previously mentioned project creativity and third party endorsements seems to be a key for CF campaign success as these ventures are deemed particularly valuable for society (Calic & Mosakowski, 2016). From an external characteristics perspective, Fisher, Kuratko, Bloodgood, and Hornsby (2017) look at the challenge of audience diversity in creating venture legitimacy and find that framing helps to manage the legitimacy judgements across various audiences with their often-differing institutional logics.

In addition, looking from a gender-dynamics perspective on audience diversity Johnson, Stevenson, and Letwin (2018) look at the potential implicit biases and the stereotype content model when it comes to women in crowdfunded start-ups. As a potential remedy, however in donation-based crowdfunding Greenberg and Mollick (2016) suggest that an "activist choice homophily" of female founders and investors may be a potential reason why females are often more successful in crowdfunding than men.

### ***Interaction, Collaboration and Innovation***

Interaction between the funders and the crowd generates trust and improves social capital. However, little is known how collaboration informs and influences opportunity recognition/formation and exploitation and thus ultimately innovation and value propositions (Mary George, Parida, Lahti, & Wincent, 2014). Valančienė and Jegelevičiūtė (2014) specifically look at the role of stakeholders and how they influence the processes in which value is created. They see the dual identities of customers and suppliers as users and backers working together in the final formation and exploitation of opportunities. Their article further discusses the diminishing role of financial institutions and their influence on value creation and the important yet evolving role of crowdfunding platforms as boundary spanners between users, backers and entrepreneurs.

The so called extra-role behaviour, which describes the deeply binding psychological effort of acquiring resources controlled by stakeholders, helps entrepreneurs to successfully enrol stakeholders. Burns, Barney, Angus, and Herrick (2016) describe this process accordingly as stakeholder enrolment and define it as a critical factor for forming and exploiting opportunities as such factors not only influence the potential investor's decision but also have an effect on the underlying idea and resulting innovation.

Yet, there may also be a trade-off between the benefits of collaborative discovery and the implied costs because of diversification. For example, Parhankangas and Ehrlich (2014) look at how entrepreneurs convince business angels (BA) and see that BAs prefer only moderate levels of promotion of innovation and blasting of competition, yet look at high levels of opinion conformity. In a later update of their work Chan and Parhankangas (2017) examine innovation even closer and see that a greater incremental innovativeness generates a greater user value in the eyes of the crowd, whereas campaigns that feature a more radical innovativeness are riskier to develop and harder to understand by the crowd and ultimately result in a less successful outcome of such campaigns. Anderson, Potocnik, and Zhou (2014) study the link between innovation and creativity in organizations and see them as integral parts of essentially the same

process. This again is a highly appropriate claim when it comes to crowdfunding as the diversity of backers and stakeholders greatly increases the creative potential.

### *A Neo-Institutional Field-Perspective: CF-Platforms between Structure and Agency*

We follow Scott (2008) when he calls for a focus on the analytic attention to higher levels of analysis in institutional theory in what he calls “field-level approaches” that look out for both, structure and agency. As Scott puts it:

*“Fields can serve a variety of functions in institutional analysis—as the locus of independent variables shaping organizational forms, as intermediate systems, mediating between organizations and wider societal forces, and as themselves dependent variables, systems whose features are to be explained” (p.435).*

Such organizational forms as intermediate systems, which mediate between organizations and wider societal forces perfectly describes crowdfunding platforms.

Scott further explains (ibid) that

“field-level arguments serve to remind analysts that

- organizations operate in systems composed of both similar and diverse forms
- organizations operate in systems of organizations involved in both competitive and cooperative relations
- the “environment” within which organizations operate is itself organized— exhibiting a distinctive cultural and social structure
- the relational structure of fields provides diverse locations for individual organizations
- organizations are affected not only by local but by distant actors and forces
- organizations are involved in both horizontal (cooperative–competitive) and vertical (power and authority) connections
- organizations are affected not only by the exchange relations in which they participate but by the existence of systems similar (exhibiting structural equivalence) to their own”

A focal actor in the field such as CFPs thus seems to increase system value through direct and indirect network externalities (Choudary, Van Alstyne, & Parker, 2016). Such externalities are of high relevance in CF as has been discussed in the literature review in the previous chapters in which the authors pointed out amongst the necessity of structural hole spanners in global CF campaigns. CFPs in this role can thus be seen as such focal actors. Lin et al. (2016) adapt this thought and offer a research framework of CFP usage, when it comes to exploring the interplay between ad-hoc project teams and the larger crowd and see how the CFP administration can contribute to opening up new opportunities for start-ups. Other early approaches can be found in Wang, Lim, and Van Toorn (2016), who adapt a persuasive systems thinking to come up with a CFP design model, or in Maier (2016), who looks at the necessity for platforms to initiate a double switching behaviour in borrowers and investors. Haas et al. (2014) provide a typology based on Hedonism, Altruism and For-Profit, and finally Belleflamme et al. (2015) explore the economic forces at play that influence the design of these platforms from an organisational level. However, despite such fruitful approaches into the individual habitus of CFPs and how these might influence existing institutions, the systemic dynamics and the shaping characteristics of such platforms for the larger field remains largely unaddressed despite the various calls by scholars (Lehner & Harrer, 2017; McKenny et al., 2017; Short et al., 2017) and hence a further theory development in the field of crowdfunding seems timely and apt.

Thus, based on the updated literature as presented in this chapter and because of the high field-dynamics of crowdfunding we also conducted an empirical inquiry to triangulate the propositions from literature with additional evidence and finally combine these in an updated model of Crowdfunding from an institutional field- perspective.

## A Field Update on Crowdfunding: CF-Platforms as Focal Actors

The objectives of this research endeavour are to identify the specific activities provided by CFPs and to critically assess the role of CFPs as focal actors in forming, enabling and restricting crowdfunding from a neo-institutionalist standpoint. Based on the findings of 23 purposefully sampled cases of various types, sizes and industries from eleven different CFPs, with a total funded sum of 77,210,781 USD, a range of: 43,724,820 and average of: 3,356,990, we finally build early theory on CF as an entrepreneurial ecosystem based upon five inductively developed propositions from a neo-institutional perspective.

The purposeful selection of the cases was based upon the criteria of being either exemplary as identified in the literature, or exceptional (Uy, Foo, & Aguinis, 2009) - with these characteristics being identified from a media reception analysis in the Forbes magazine over the years 2014-2017. The cases and platforms were examined in-depth through the collection of primary and secondary documents, interviews with founders and platform managers and ethnographic observations, leading to over 300 individual documents. The sampling was deemed pseudo-complete after a theoretical saturation criterion of “no new codes after 2 additional cases” was reached. A full list of the cases and documents can be downloaded via the QR code in figure 1, with a aggregated sample overview in table 1.



Figure 1 - QR Code to the document list and case descriptions.

Origin Country:	Types:	Industry:	Summary:
US: 16	Reward: 9	Hi-Tech: 8	11 platforms
UK: 3	Equity: 8	Hygiene: 1	23 cases
AUS: 2	Donation: 3	Tourism: 3	308 docs
OTHERS: 2	InDemand: 1	Social: 2	1901 codes
TOTAL:23	Lending: 2	Software: 4	3 coders
		Consumer.: 4	5 propositions
		Personal: 1	

Table 1 – Sampling Overview

This inductive approach holds well with Watson (2013), who demands that entrepreneurship research needs to achieve a better balance between studying entrepreneurial activities and setting these activities in their wider context through ethnographic research with concepts from sociology and from pragmatist thinking. Watson further argues that field research should be innovative in combining in-depth studies of several enterprises and their founders with the analysis of broader aspects of ‘entrepreneurship in society’, by a process of ‘everyday ethnographic’ observation, reading, conversation and ongoing analysis.

Selected excerpts of the data were first transformed into standardized meaningful units, discarding rhetorical artefacts and then subsequently coded based upon the proven techniques as set out by Denzin and Lincoln (2005). The transformation into meaningful units and the actual coding took place in a multi-coder (3 persons), recursive and iterative process (all

documents at least 3 times each with additional codes from others) using the software Atlas.TI, with a continuously developed coding manual and regular discussions between the coders, for example by comparing and contrasting differing findings of the same material. All disputes (84 out of 1901) were settled using a majority system.

True to the inductive nature of the research no a-priori codes were applied, yet the previously discussed ecosystem framework of actors, activities, positions and links was used to give structure to the findings later on, following suggestions by Eisenhardt, Graebner, and Sonenshein (2016).

The codes were then summarized into five propositions based on the conflux of the findings with the existing literature. In this we follow Cornelissen (2017) suggestions on common styles of theorizing and aim to *“explain the fuzzy nature of many subjects by logically and causally combining different constructs into a coherent and explanatory set of types”* (p. 3). These propositions were then combined to build early theory on CF as entrepreneurial ecosystem that we further illustrated in a model displaying actors, positions, links and activities.

## Findings and Inductive Themes

Examining structure and agency from a field level in crowdfunding, with a focus on CFPs as focal actors, the following five propositions were developed. The 7-digit numbers in brackets point to the exemplary documents, and the full list of cases and documents can be found on using the QR link in figure 1. After the individual discussion of the propositions, a summary will be illustrated in figure 2, depicting the CF system with numbers as links to the propositions.

**Proposition 1: CFPs are positioned as trusted platforms and centralized catalogues, providing signals and localized value-translation in order to communicate the legitimacy of the CF-ventures to the Crowd.**

Looking at the cues and signals that are created throughout a crowdfunding campaign we find that crowdfunding campaigns are used to test market acceptance and estimate demand beforehand [0101000, 0213000, 0221000, 0518000]. The most prominent signals we identified were: funding milestones, early adoption and pledges, media and news reception, public feedback related to both the ideas and the people involved, dedicated investment requests from venture capitalists (VCs) inquiring on the progress [0204000], and cross venture backing from other campaigns [0222303, 0222304]. Besides the signals, we found the following cues: the radiance and attire of the entrepreneurial team, the innovativeness of the ideas and the willingness to respond to questions.

In some cases, the signal and marketing perspectives even dominated the crowdfunding motivation of the ventures. As an example, the Nuyu Sleep System [022000] uses the platform Indiegogo to gain customer feedback from early adopters - individuals highly inclined to test new products and services. Because of the collaborative spirit of investors in crowdfunding, said feedback and the interaction with the crowd may well lead to adaptations of the product or business model [0101000] and as such may contribute to a successful market entry. For example, Pebble adapted their watches based on numerous inputs from the crowd and was highly successful in three CF campaigns (total volume of approximately \$44 million [0101241, 001242, 0101243, 0101247] and ultimately positively exited [0101248]. Through signals, including the willingness to adapt, trust is created and ultimately the legitimacy of the ventures is improved. Another example being “MyShowCase” [0310000] who are not primarily seeking

funds but rather wanting to build a solid community of customers and partners for their online-run beauty product platform.

From the perspective of (corporate) venture capitalists, CFPs can be seen as a central hub providing a catalogue of innovative ideas and a virtual marketplace for private and corporate investors [0200000] in which the successful funding by the crowd would act as a strong signal to institutional investors and corporations looking to enhance their real options strategies.

Platforms also need to signal their reputation and values to enhance legitimacy. One strategy is to embrace ventures with a strong societal relevance and high chance of success in their portfolios. Some, such as Indiegogo even go so far to create a separate space for social causes. One salient example of a donation-based CF would be the Pencils of Promise [0215000] based on Indiegogo's Generosity.

**Proposition 2: Strong CPFs as focal actors use their power to enable, but also to influence the configuration of CF-Ventures in their role as gatekeepers, leading to standardization and pre-mature isomorphism**

Crowdfunding platforms supply brochures and checklists and provide consulting and expert services [0100022] to aspiring ventures, for example, how to structure their campaigns and create a compelling business story [0100023] or how to better align their business models [0300188]. In some cases, these consulting services also contribute to the income of the platforms but more often they are offered for free as part of the marketing activities. Comparing guides from high profile platforms such as Kickstarter [0100000], Indiegogo [0200000] and Crowdcube [0300000], they all seem to cover the same topics with only nuances of difference.

The resulting uniformity of the campaigns based on the ubiquity of the platforms' idiosyncratic rules and guidelines [0100191, 0200203, 0300190] certainly helps investors to better compare CF campaigns and thus reduce the transaction costs involved. However, besides the obvious beneficial effects of these activities there are also unforeseen consequences that may be explained through a neo-institutional lens - as the strong influence of the platforms and willingness of the ventures to adapt may well create an unintentional reflexive isomorphic convergence of the ventures, which does not lead to a higher legitimacy but only results in a lesser variability and unfair discrimination of non-conformant campaigns. A reason for this may be that ventures see others follow these sets of guidelines and rules and blindly pursue the same configuration, not because of their success but because of convenience and external pressure by the platforms. This again illustrates the unequal hierarchical power positions of fund-seeking ventures and the CFPs as focal actors in the crowdfunding system.

Besides the role as enabler through the provision of advisory services, CFPs also act as gatekeepers in the selection of ventures, based on an often-discretionary set of rules [0700284, 0700285, 0200206]. In theory, this is meant to increase the quality of the visible campaigns, but because these rules and the due-diligence in their execution are often not overly transparent and seem to be rather ad-hoc, platforms again contribute to an isomorphic system and create somewhat unsubstantiated entry-barriers.

**Proposition 3: CFPs as central platforms bring together, enable and control the resource-flow between ventures and the crowd as actors for Co-Creation and Open-Innovation processes, by making use of rapidly evolving technological infrastructure.**

Platforms provide the technological base for a two-way communication infrastructure, allowing direct participation of the investors and stakeholders. CFPs can be seen to offer a co-creation space [0100286, 0214092, 0700284, 0800266, 0222000] so that investors and stakeholders can actively contribute to the dynamic formation of the business model [0100286,

0800253, 0222000] and participate in relevant decision-making processes [0101300, 0101301, 0106297, 0309302]. Taking in the advice from the crowd, entrepreneurs can adapt to changes in the perceived demand or even follow new opportunities [0700284]. For example, Kickstarter provides a connection tool to other CF experienced entrepreneurs [0100022, 0700307]. Ventures then can directly contact established and renowned experts to ask their opinion on various potential situations. In addition, direct contact to VC and other corporate investors is provided via specific tools and platforms [0204000].

Through the continuous interaction between the investors, ventures and the platform co-creation is enabled. The question of demands on technological savviness of the crowd using tools for co-creation however has not been addressed so far and may explain the low market share of CF investors from developing countries [9900308].

**Proposition 4a: Ventures reach out to other funding sources from actors such as venture capitalists, business angels or even other platforms via CFPs to initiate so called Cascaded-Funding Strategies for scaling.**

**Proposition 4b: In these Cascaded-Funding-Strategies CFPs act as information brokers and repositories for the necessary large-scale and professional Investor Relations that would otherwise overly burden smaller ventures.**

The often-short history of the fund-seeking ventures poses a substantial risk bearing significant transaction costs. Platforms address and mitigate this risk by linking to additional sources of information [0204006, 0204007, 0310056]. Ventures however not only use platforms for their very early-stage funding but also use CF more and more to expand their market and scale-up their businesses. For this, ventures often seek a mix of various funding instruments, including debt, equity and reward-based crowdfunding [0517000, 0518148]. In this, one especially important perspective seems to be the chronology and success of the various options, amongst the pitch performance [0116104, 0221218, 0309051, 0516128] and the funding history [0309054, 0412086, 0420178, 0420176]. Early ventures typically start with some form of reward-based CF [010100, 0308000, 0411000] and continue later, after the successful market entry, to seek additional capital in form of debt and equity, either again via a platform or from VCs and banks.

Besides a tailored investment story [0116112, 0200181, 0200183, 0700283, 0800266], one especially relevant strategy for ventures seems to be to create some form of intellectual capital, for example patents to be used as a collateral in the latter stages of the funding process [0102000, 0107000, 0412000, 0619000]. Such stepwise developments need very different communication strategies for each milestone and can thus be seen examined as a “funding cascade”. Platforms have to adapt their services in order to attract a variety of investor groups and stay relevant for the ventures’ additional funding round intentions. One problem field that we identified, however, is that the presentation of the ventures on dedicated equity CF platforms needs to be very different to other forms, as cash-flow projections and terminology around profit-sharing are more predominant.

An example would be the partnering of the platform Indiegogo with *Microventures.com*, offering access to a venture capital network, a business-angel community and an equity-crowdfunding platform at the same time. A young distillery in the United States named “Republic Restoratives” [0204000] makes uses the said partnership to further increase their production capacity and market share. Via the equity crowdfunding platform Crowdcube the “Hop Stuff Brewery” [0308000] runs its second campaign to open more bars across the city of London and finance their new packaging which fits the strategy of large-scale exporting.

IntaCept Ltd. [0412000] is already running their fourth funding round at the Australian equity-based platform ASSOB in order to further develop their services and products.

Concomitantly with the role of a counselling partner for funding cascades, CFPs can thus also be understood as information brokers between investors of all sorts and the ventures with the ultimate goal of reducing information asymmetries and leading to a successful funding [0100027, 0100028, 0200181, 0200182, 0221217]. What has been found while analysing the provided information is that reporting elements, amongst those concerning risk and Corporate Social Responsibility (CSR) information are often only implicitly referred to, compared to the established standards in traditionally funded ventures.

**Proposition 5: Public policy and institutionalized regimes exert and influence CFPs and are in-term influenced by their strong agenda building activities and advocacy.**

Platforms are not only subjected to regulations themselves [0800252, 9900287, 9900288, 9900291] but also inform and in some cases, influence legislation to improve and enhance the current regulatory status of crowdfunding [0500220, 9900294, 9900295]. In many cases, platforms work together on this to increase their bargaining power and outreach to the relevant authorities. In Europe for example, the European Crowdfunding Network (ECN), a network of many influential platforms and individuals advocate for a common European framework on crowdfunding and inform local governments [0500143]. At the same time, it is inherently important for governmental bodies and policy makers to be provided with experts from different perspectives in the new and often poorly understood field of crowdfunding. For example, when former US-president Barack Obama signed the JOBS Act in 2012, many CFPs were part of the development process [9900291] providing their expertise to the Senate and Congress. Alongside business angels, VCs and other experts, the platforms Indiegogo [0200000], Kiva [0700000] and RocketHub [0800000] among many others were involved in the development-process of the JOBS Act. As European examples, Symbid [0600000], a Dutch CFP supports the local legislation in coordinating relevant crowdfunding development-processes and in Austria the platform 1000x1000 [0500000] has played a crucial role in the new act on crowdfunding and crowd investing [0518148]. CFPs thus can be seen as catalysts to initiate negotiations and policy making concerning societal demands as well as the needs of the crowd and the ventures [0500143].

From a more critical perspective, the previously addressed phenomenon of reflexive isomorphism makes it easier for CFPs to regulate and tailor the market to their own business interests, thus potentially overpowering the perspectives of market rivals in the field. What is more, some platforms may need to compromise their own strategy to comply with demands from other powerful players because they rely on corporations, institutions and service co-operations in their business model, as seen in Kiva [0700274, 0700275, 0700276] partnering with the HP or MasterCard foundations or Ernst&Young as critical stakeholders.

Summing up the five propositions and structuring the discussed findings we provide a schema in figure 2 to illustrate the actors, positions, links and related activities in Crowdfunding, based on a prior version in Lehner (2013). The numbers in this schema correspond to the numbering of the propositions as previously outlined.



(Foss & Saebi, 2016; Lehner et al., 2015; Partanen, Chetty, & Rajala, 2014; Song, Min, Lee, & Seo, 2017), and also sociology and information technology (Haas et al., 2014; Paradkar, Knight, & Hansen, 2015).

For ventures seeking funding from the crowd, our research supports important voices, that the decision for a specific CFP has far-reaching consequences on their business model and governance (Brown et al., 2018; McKenny et al., 2017; Short et al., 2017). In order to create a successful campaign, they not only need to align their business models with their choice of platform and type of CF, but also need to be aware of signalling effects (Reuber & Fischer, 2009) and understand how their investor-relations need to be configured to appropriately reach the crowd and transport their societal relevance and thus create legitimacy. What is more, the identified *reputation and technology nexus* (Löher, 2017) between the venture and the platform demands a careful selection process for both, as the entrepreneurial opportunity and the individual founders' personalities need to match the value offerings and strategic positioning of the platform as well as the other project offers. This brings with it interesting perspectives from cooptation (Bengtsson & Johansson, 2014) and (cultural) appropriation (Freel & Robson, 2016).

Instead of simply tapping the crowd, ventures need to create customized communication and activation strategies (Freel & Robson, 2016; Love & Roper, 2015) through the platforms acting as catalysts to fully realize the value propositions implied in crowdfunding. Besides funding, these would include the invitation to a co-creation of opportunities, for advocacy in hostile environments (Kuratko, McMullen, Hornsby, & Jackson, 2017) and open communication channels for public relations. What is more, recent developments such as ICOs bring with the promise of creating a secondary market that will further improve the environment (Adhami et al., 2018). In their research agenda, Arena, Bengo, Calderini, and Chiodo (2018) ask whether the provision of non-financial services from investors enhance the survival of a social venture. Said services from CFPs certainly do so, as our study showed, through the boost in networking and awareness levels. Furthermore, as Ben Youssef, Boubaker, and Omri (2017) point out, the relationship between entrepreneurship and sustainable development turns strongly positive in the presence of high levels of innovation and institutional quality. Both factors are well enhanced through crowdfunding platforms.

Nambisan (2016) mentions the intersection of digital technologies and entrepreneurship in his work, which depicts another important aspect to consider in crowd-funded ventures. Research on CF thus may also provide additional insights into the digital sphere of entrepreneurship and into the power struggles between the various actors within.

Finally, addressing the role of CFPs as social-catalysts for change, it seems safe to claim based on our findings that crowdfunding especially for ventures can indeed be understood as a new, alternative form with the potential for disruption of the current status-quo - not only because of its differing mechanisms, but because of its inherent value propositions, which are based on societal values (Brandstetter & Lehner, 2015; Lehner, 2013). These are embedded in and driven by an overall societal change process based on empowerment and equality towards a more sustainable and inclusive society.

What becomes clear is that a systemic lens indeed holds a strong promise for research into crowdfunding and that any attempt to better understand the processes within this system needs to be inter-disciplinary in its nature and comprise societal as well as individual motivations. Research needs to that take into consideration both, structure and agents, but with a renewed, particular focus on the interplay as this interplay may be the very fabric that socio-economic phenomena build upon.

We would also suggest a future scholarly discussion on contextuality and the constructed nature of crowdfunding and how current, sometimes narrow epistemological assumptions can fail to provide answers in entrepreneurial finance. This reverberates well with McKenny et al.

(2017) when they suggest topics for future research and ask “*How do cultural traditions influence perceptions of the legitimacy of crowdfunding*” (p.11).

## References

- Adhami, S., Giudici, G., & Martinazzi, S. 2018. Why do businesses go crypto? An empirical analysis of initial coin offerings. *Journal of Economics and Business*.
- Agrawal, A., Catalini, C., & Goldfarb, A. 2015. Crowdfunding: Geography, social networks, and the timing of investment decisions. *Journal of Economics & Management Strategy*, 24(2): 253-274.
- Ahlers, G. K. C., Cumming, D., Günther, C., & Schweizer, D. 2015. Signaling in Equity Crowdfunding. *Entrepreneurship Theory and Practice*, 39(4): 955-980.
- Allison, T. H., Davis, B. C., Short, J. C., & Webb, J. W. 2015. Crowdfunding in a Prosocial Microlending Environment: Examining the Role of Intrinsic Versus Extrinsic Cues. *Entrepreneurship Theory and Practice*, 39(1): 53-73.
- Allison, T. H., Davis, B. C., Webb, J. W., & Short, J. C. 2017. Persuasion in crowdfunding: An elaboration likelihood model of crowdfunding performance. *Journal of Business Venturing*, 32(6): 707-725.
- Anderson, N., Potocnik, K., & Zhou, J. 2014. Innovation and Creativity in Organizations: A State-of-the-Science Review, Prospective Commentary, and Guiding Framework. *Journal of Management*, 40(5): 1297-1333.
- Anglin, A. H., Short, J. C., Drover, W., Stevenson, R. M., McKenny, A. F., & Allison, T. H. 2018a. The power of positivity? The influence of positive psychological capital language on crowdfunding performance. *Journal of Business Venturing*, 33(4): 470-492.
- Anglin, A. H., Wolfe, M. T., Short, J. C., McKenny, A. F., & Pidduck, R. J. 2018b. Narcissistic rhetoric and crowdfunding performance: A social role theory perspective. *Journal of Business Venturing*, 33(6): 780-812.
- Arena, M., Bengo, I., Calderini, M., & Chiodo, V. 2018. Unlocking finance for social tech start-ups: Is there a new opportunity space? *Technological Forecasting and Social Change*, 127: 154-165.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. 2014. Crowdfunding: Tapping the right crowd. *Journal of Business Venturing*, 29(5): 585-609.
- Belleflamme, P., Omrani, N., & Peitz, M. 2015. The economics of crowdfunding platforms. *Information Economics and Policy*, 33: 11-28.
- Ben Youssef, A., Boubaker, S., & Omri, A. 2017. Entrepreneurship and sustainability: The need for innovative and institutional solutions. *Technological Forecasting and Social Change*.
- Bengtsson, M., & Johansson, M. 2014. Managing coopetition to create opportunities for small firms. *International Small Business Journal*, 32(4): 401-427.
- Bi, S., Liu, Z., & Usman, K. 2017. The influence of online information on investing decisions of reward-based crowdfunding. *Journal of Business Research*, 71: 10-18.
- Brandstetter, L., & Lehner, O. M. 2015. Opening the Market for Impact Investments: The Need for Adapted Portfolio Tools. *Entrepreneurship Research Journal*, 0(0).
- Brinckmann, J., & Kim, S. M. 2015. Why We Plan: The Impact of Nascent Entrepreneurs' Cognitive Characteristics and Human Capital on Business Planning. *Strategic Entrepreneurship Journal*, 9(2): 153-166.
- Brown, R., Mawson, S., Rowe, A., & Mason, C. 2018. Working the crowd: Improvisational entrepreneurship and equity crowdfunding in nascent entrepreneurial ventures. *International Small Business Journal*, 36(2): 169-193.

- Bruton, G., Khavul, S., Siegel, D., & Wright, M. 2015. New Financial Alternatives in Seeding Entrepreneurship: Microfinance, Crowdfunding, and Peer-to-Peer Innovations. *Entrepreneurship Theory and Practice*, 39(1): 9-26.
- Burns, B. L., Barney, J. B., Angus, R. W., & Herrick, H. N. 2016. Enrolling Stakeholders under Conditions of Risk and Uncertainty. *Strategic Entrepreneurship Journal*, 10(1): 97-106.
- Burt, R. S. 2004. Structural holes and good ideas. *American journal of sociology*, 110(2): 349-399.
- Busenitz, L. W., Plummer, L. A., Klotz, A. C., Shahzad, A., & Rhoads, K. 2014. Entrepreneurship research (1985–2009) and the emergence of opportunities. *Entrepreneurship Theory and Practice*, 38(5): 981-1000.
- Butticè, V., Colombo, M. G., & Wright, M. 2017. Serial Crowdfunding, Social Capital, and Project Success. *Entrepreneurship Theory and Practice*, 41(1): 1540-6520.
- Calic, G., & Mosakowski, E. 2016. Kicking Off Social Entrepreneurship: How A Sustainability Orientation Influences Crowdfunding Success. *Journal of Management Studies*, 53(5): 738-767.
- Cardon, M. S., Mitteness, C., & Sudek, R. 2016. Motivational Cues and Angel Investing: Interactions Among Enthusiasm, Preparedness, and Commitment. *Entrepreneurship Theory and Practice*, 40(5).
- Chan, C. S. R., & Parhankangas, A. 2017. Crowdfunding Innovative Ideas: How Incremental and Radical Innovativeness Influence Funding Outcomes. *Entrepreneurship Theory and Practice*.
- Cholakova, M., & Clarysse, B. 2015. Does the Possibility to Make Equity Investments in Crowdfunding Projects Crowd Out Reward-Based Investments? *Entrepreneurship Theory and Practice*, 39(1): 145-172.
- Choudary, S. P., Van Alstyne, M. W., & Parker, G. G. 2016. *Platform revolution: How networked markets are transforming the economy--and how to make them work for you*: WW Norton & Company.
- Colombo, M. G., Franzoni, C., & Rossi-Lamastra, C. 2015. Internal Social Capital and the Attraction of Early Contributions in Crowdfunding. *Entrepreneurship Theory and Practice*, 39(1): 75-100.
- Cornelissen, J. 2017. Editor's Comments: Developing Propositions, a Process Model, or a Typology? Addressing the Challenges of Writing Theory Without a Boilerplate. *Academy of Management Review*, 42(1): 1-9.
- Courtney, C., Dutta, S., & Li, Y. 2017. Resolving Information Asymmetry: Signaling, Endorsement, and Crowdfunding Success. *Entrepreneurship Theory and Practice*, 41(2): 265-290.
- Dacin, M. T., Goodstein, J., & Scott, W. R. 2002. Institutional Theory and Institutional Change. *Academy of Management Journal*, 45(1): 45-47.
- Davis, B. C., Hmieleski, K. M., Webb, J. W., & Coombs, J. E. 2017. Funders' positive affective reactions to entrepreneurs' crowdfunding pitches: The influence of perceived product creativity and entrepreneurial passion. *Journal of Business Venturing*, 32(1): 90-106.
- Demil, B., Lecocq, X., Ricart, J. E., & Zott, C. 2015. Introduction to the SEJ Special Issue on Business Models: Business Models within the Domain of Strategic Entrepreneurship. *Strategic Entrepreneurship Journal*, 9(1): 1-11.
- Denzin, N., & Lincoln, Y. 2005. *The Sage handbook of qualitative research, Third Edition*. London: Sage Publications Ltd.
- Drover, W., Wood, M. S., & Zacharakis, A. 2017. Attributes of Angel and Crowdfunded Investments as Determinants of VC Screening Decisions. *Entrepreneurship Theory and Practice*, 41(3): 323-347.

- Eisenhardt, K. M., Graebner, M. E., & Sonenshein, S. 2016. Grand Challenges and Inductive Methods: Rigor without Rigor Mortis. *Academy of Management Journal*, 59(4): 1113-1123.
- Fisher, G., Kuratko, D. F., Bloodgood, J. M., & Hornsby, J. S. 2017. Legitimate to whom? The challenge of audience diversity and new venture legitimacy. *Journal of Business Venturing*, 32(1): 52-71.
- Foss, N. J., & Saebi, T. 2016. Fifteen Years of Research on Business Model Innovation: How Far Have We Come, and Where Should We Go? *Journal of Management*, 43(1): 200-227.
- Fraser, S., Bhaumik, S. K., & Wright, M. 2015. What do we know about entrepreneurial finance and its relationship with growth? *International Small Business Journal*, 33(1): 70-88.
- Freel, M., & Robson, P. J. 2016. Appropriation strategies and open innovation in SMEs. *International Small Business Journal*: 0266242616654957.
- Frydrych, D., Bock, A. J., Kinder, T., & Koeck, B. 2014. Exploring entrepreneurial legitimacy in reward-based crowdfunding. *Venture Capital*, 16(3): 247-269.
- Greenberg, J., & Mollick, E. 2016. Activist Choice Homophily and the Crowdfunding of Female Founders. *Administrative Science Quarterly*, 62(2): 341-374.
- Haas, P., Blohm, I., & Leimeister, J. 2014. *An Empirical Taxonomy of Crowdfunding Intermediaries*. Paper presented at the Thirty Fifth International Conference on Information Systems, Auckland.
- Jääskeläinen, M., & Maula, M. 2014. Do networks of financial intermediaries help reduce local bias? Evidence from cross-border venture capital exits. *Journal of Business Venturing*, 29(5): 704-721.
- Johnson, M. A., Stevenson, R. M., & Letwin, C. R. 2018. A woman's place is in the... startup! Crowdfunder judgments, implicit bias, and the stereotype content model. *Journal of Business Venturing*, 33(6): 813-831.
- Josefy, M., Dean, T. J., Albert, L. S., & Fitza, M. A. 2016. The Role of Community in Crowdfunding Success: Evidence on Cultural Attributes in Funding Campaigns to "Save the Local Theater". *Entrepreneurship Theory and Practice*, 41(1).
- Kratzer, J., Meissner, D., & Roud, V. 2017. Open innovation and company culture: Internal openness makes the difference. *Technological Forecasting and Social Change*, 119: 128-138.
- Kromidha, E., & Robson, P. 2016. Social identity and signalling success factors in online crowdfunding. *Entrepreneurship & Regional Development*, 28(9-10): 605-629.
- Kuppuswamy, V., & Bayus, B. L. 2017. Does my contribution to your crowdfunding project matter? *Journal of Business Venturing*, 32(1): 72-89.
- Kuratko, D. F., McMullen, J. S., Hornsby, J. S., & Jackson, C. 2017. Is your organization conducive to the continuous creation of social value? Toward a social corporate entrepreneurship scale. *Business Horizons*.
- Lagazio, C., & Querci, F. 2018. Exploring the multi-sided nature of crowdfunding campaign success. *Journal of Business Research*, 90: 318-324.
- Lehner, O. M. 2013. Crowdfunding social ventures: a model and research agenda. *Venture Capital*, 15(4): 289-311.
- Lehner, O. M. 2014. The formation and interplay of social capital in crowdfunded social ventures. *Entrepreneurship & Regional Development*, 26(5-6): 478-499.
- Lehner, O. M., Grabmann, E., & Ennsgraber, C. 2015. Entrepreneurial implications of crowdfunding as alternative funding source for innovations. *Venture Capital*, 17(1-2): 171-189.

- Lehner, O. M., & Harrer, T. 2017. *Crowdfunding Platforms as Super-Catalysts in an Entrepreneurial Ecosystem*. Paper presented at the British Academy of Management Proceedings.
- Lin, W.-S., & Shih, Y.-Y. 2016. *A research framework of crowdfunding platform usage*. Paper presented at the 22nd Americas Conference on Information Systems, San Diego.
- Löher, J. 2016. The interaction of equity crowdfunding platforms and ventures: an analysis of the preselection process. *Venture Capital*, 19(1-2): 51-74.
- Löher, J. 2017. The interaction of equity crowdfunding platforms and ventures: an analysis of the preselection process. *Venture Capital*, 19(1-2): 51-74.
- Love, J. H., & Roper, S. 2015. SME innovation, exporting and growth: a review of existing evidence. *International Small Business Journal*, 33(1): 28-48.
- Lukkarinen, A., Teich, J. E., Wallenius, H., & Wallenius, J. 2016. Success drivers of online equity crowdfunding campaigns. *Decision Support Systems*, 87: 26-38.
- Maier, E. 2016. Supply and demand on crowdlending platforms: connecting small and medium-sized enterprise borrowers and consumer investors. *Journal of Retailing and Consumer Services*, 33: 143-153.
- Mary George, N., Parida, V., Lahti, T., & Wincent, J. 2014. A systematic literature review of entrepreneurial opportunity recognition: insights on influencing factors. *International Entrepreneurship and Management Journal*, 12(2): 309-350.
- McKenny, A. F., Allison, T. H., Ketchen, D. J., Short, J. C., & Ireland, R. D. 2017. How Should Crowdfunding Research Evolve? A Survey of the Entrepreneurship Theory and Practice Editorial Board. *Entrepreneurship Theory and Practice*.
- Mollick, E. 2014. The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1): 1-16.
- Moss, T. W., Neubaum, D. O., & Meyskens, M. 2015. The Effect of Virtuous and Entrepreneurial Orientations on Microfinance Lending and Repayment: A Signaling Theory Perspective. *Entrepreneurship Theory and Practice*, 39(1): 27-52.
- Nambisan, S. 2016. Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship. *Entrepreneurship Theory and Practice*, 40(5): 1-27.
- Paradkar, A., Knight, J., & Hansen, P. 2015. Innovation in start-ups: Ideas filling the void or ideas devoid of resources and capabilities? *Technovation*, 41-42: 1-10.
- Parhankangas, A., & Ehrlich, M. 2014. How entrepreneurs seduce business angels: An impression management approach. *Journal of Business Venturing*, 29(4): 543-564.
- Parhankangas, A., & Renko, M. 2017. Linguistic style and crowdfunding success among social and commercial entrepreneurs. *Journal of Business Venturing*, 32(2): 215-236.
- Partanen, J., Chetty, S. K., & Rajala, A. 2014. Innovation Types and Network Relationships. *Entrepreneurship Theory and Practice*, 38(5): 1027-1055.
- Paschen, J. 2016. Choose wisely: Crowdfunding through the stages of the startup life cycle. *Business Horizons*, in press: 1-10.
- Rassenfosse, G., & Fischer, T. 2016. Venture debt financing: Determinants of the lending decision. *Strategic Entrepreneurship Journal*, 10(3): 235-256.
- Reuber, A. R., & Fischer, E. 2009. Signalling reputation in international online markets. *Strategic Entrepreneurship Journal*, 3(4): 369-386.
- Reuber, A. R., & Fischer, E. 2011. International entrepreneurship in internet-enabled markets. *Journal of Business Venturing*, 26(6): 660-679.
- Roma, P., Messeni Petruzzelli, A., & Perrone, G. 2017. From the crowd to the market: The role of reward-based crowdfunding performance in attracting professional investors. *Research Policy*, 46(9): 1606-1628.

- Ruutu, S., Casey, T., & Kotovirta, V. 2017. Development and competition of digital service platforms: A system dynamics approach. *Technological Forecasting and Social Change*, 117: 119-130.
- Ryu, S., & Kim, K. 2016. Crowdfunding Success as a Quality Signal to Venture Capital, *22 Americas Conference on Information Systems*. San Diego: IEEE/ AIS.
- Scott, W. R. 2008. Approaching adulthood: the maturing of institutional theory. *Theory and Society*, 37(5): 427-442.
- Short, J. C., Ketchen, D. J., McKenny, A. F., Allison, T. H., & Ireland, R. D. 2017. Research on Crowdfunding: Reviewing the (Very Recent) Past and Celebrating the Present. *Entrepreneurship Theory and Practice*: 1-12.
- Skirnevskiy, V., Bendig, D., & Brettel, M. 2017. The Influence of Internal Social Capital on Serial Creators' Success in Crowdfunding. *Entrepreneurship Theory and Practice*: 1-28.
- Song, G., Min, S., Lee, S., & Seo, Y. 2017. The effects of network reliance on opportunity recognition: A moderated mediation model of knowledge acquisition and entrepreneurial orientation. *Technological Forecasting and Social Change*, 117: 98-107.
- Stemler, A. R. 2013. The JOBS Act and crowdfunding: Harnessing the power—and money—of the masses. *Business Horizons*, 56(3): 271-275.
- Uy, M. A., Foo, M. D., & Aguinis, H. 2009. Using Experience Sampling Methodology to Advance Entrepreneurship Theory and Research. *Organizational Research Methods*, 13(1): 31-54.
- Valančienė, L., & Jegelevičiūtė, S. 2014. Crowdfunding for Creating Value: Stakeholder Approach. *Procedia - Social and Behavioral Sciences*, 156: 599-604.
- Vismara, S. 2016. Information Cascades Among Investors in Equity Crowdfunding. *Entrepreneurship Theory and Practice*, 41(1): 1-31.
- Walthoff-Borm, X., Schwienbacher, A., & Vanacker, T. 2018. Equity crowdfunding: First resort or last resort? *Journal of Business Venturing*, 33(4): 513-533.
- Wang, B., Lim, E., & Van Toorn, C. 2016. *Gimme Money! Designing Digital Entrepreneurial Crowdfunding Platforms*. Paper presented at the PACIS 2016 Proceedings.
- Watson, T. J. 2013. Entrepreneurship in action: bringing together the individual, organizational and institutional dimensions of entrepreneurial action. *Entrepreneurship & Regional Development*, 25(5-6): 404-422.
- Wright, M., Lumpkin, T., Zott, C., & Agarwal, R. 2016. The Evolving Entrepreneurial Finance Landscape. *Strategic Entrepreneurship Journal*, 10(3): 229-234.
- Xu, B., Zheng, H., Xu, Y., & Wang, T. 2016. Configurational paths to sponsor satisfaction in crowdfunding. *Journal of Business Research*, 69(2): 915-927.
- Zahra, S. A., & Wright, M. 2011. Entrepreneurship's Next Act. *Academy of Management Perspectives*, 25(4): 67-83.
- Zahra, S. A., Wright, M., & Abdelgawad, S. G. 2014. Contextualization and the advancement of entrepreneurship research. *International Small Business Journal*, 32(5): 479-500.
- Zheng, H., Li, D., Wu, J., & Xu, Y. 2014. The role of multidimensional social capital in crowdfunding: A comparative study in China and US. *Information & Management*, 51(4): 488-496.
- Zvilichovsky, D., Inbar, Y., & Barzilay, O. 2013. *Playing Both Sides of the Market: Success and Reciprocity on Crowdfunding Platforms*. Paper presented at the Thirty Fourth International Conference on Information Systems, Milan.