Gottfried Wilhelm Leibniz Universität Hannover
Wirtschaftswissenschaftliche Fakultät
Institut für interdisziplinäre Arbeitswissenschaft
Professur für Innovationsmanagement

Crowdfunding and the Innovation Potential of Initial Coin Offerings

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vorgelegt von

Name: Voss Vorname: Lasse

Prüfer: Prof. Dr. Johann Nils Foege

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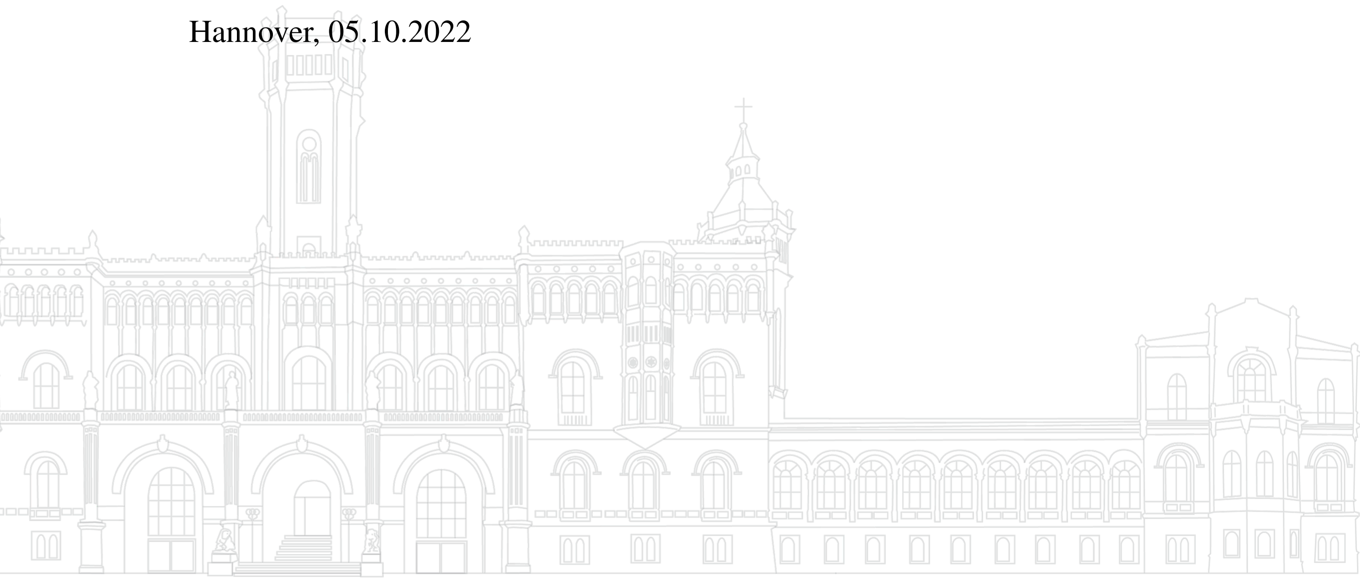

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Abstract

New ventures often face the challenge of fundraising. Crowdfunding (CF) and Initial Coin Offerings (ICOs) as relatively new mechanisms promise to remedy this situation. However, not enough is known about how the diverse characteristics of project owners affect fundraising performance. To address this, I examine 986 projects from one of the largest CF platforms, *Indiegogo*, for the effects of team type, human identity disclosure and experience on project success and innovativeness. My results show that CF teams and experienced project owners are more successful, while experience in turn is not an indicator for more innovative projects and a human-seeming identity does not have a positive impact on success. I link these findings to insights on ICOs to discuss the innovation potential of ICOs in comparison and provide implications for theory and practice. Despite some limitations, my study contributes to entrepreneurial fundraising, signaling theory and characteristics of project owners, and points to future research directions.

Keywords: Crowdfunding; Initial Coin Offerings; Innovation; Success; Signaling

1 Introduction

New entrepreneurial ventures face multiple challenges. In particular, financing in an early development phase is crucial for success and the ability to innovate through a project. The options for raising capital appear to be diverse and at the same time opaque, because new mechanisms are constantly emerging: In addition to venture capital (VC), family offices or business angels, other new phenomenons have come into play in recent years (Belleflamme, Lambert, & Schwienbacher, 2014; Courtney, Dutta, & Li, 2017): Crowdfunding (CF) and Initial Coin Offerings (ICOs). However, what all these mechanisms have in common is the special circumstance of information asymmetry between potential resource providers and recipients (Chod & Lyandres, 2021; Sewaid, Garcia-Cestona, & Silaghi, 2021).

In CF, though, the decision about funding is not made centrally by one or a few decision-makers, but by many individuals, the so-called crowd. Online platforms designed for this purpose serve as an exchange medium and promise a more efficient way of informing potential investors (Belleflamme, Omrani, & Peitz, 2015; Mollick, 2014). Nevertheless, the project owners, i.e., the initiators of a CF campaign, must actively disclose credible information about themselves and the project in order to provide potential investors with a well-founded basis for decision-making (Burtch, Ghose, & Wattal, 2016; Ordanini, Miceli, Pizzetti, & Parasuraman, 2011). This follows the widely accepted signaling theory for resolving information asymmetries (Connelly, Certo, Ireland, & Reutzel, 2011; Spence, 1973). Many signals that indicate a desirable outcome of a CF campaign have already been identified. Blaseg, Schulze, & Skiera (2020) and Lagazio & Querci (2018), for example, show a comprehensive overview of determinants of successful and innovative CF projects, ranging from campaign, marketing and organizational features to team and product qualities.

In the variant of reward-based CF considered in this thesis, for which *Indiegogo* is one of the largest platforms worldwide, the special circumstance is that actual supporters, so-called backers, are often also prospective consumers as opposed to traditional investors. So it stands to reason that backers particularly value signals that relate to product quality and financial rewards (Akerlof, 1970; Sewaid et al., 2021). My present study, however, focuses primarily on the signals of human capital, i.e., project owner characteristics, and investigates the research question whether and to what extent these have an influence on the project outcome, i.e., success and innovativeness of CF projects. Specifically, I quantitatively analyze the effects of team existence, human identity revelation and campaign experience based on a dataset generated via *Indiegogo*.

Transactional platforms such as *Indiegogo* are understood as value-creating spaces that enable the exchange of products and services between two or more parties (Cennamo & Santalo, 2013; Gawer, 2014). ICOs, on the other hand, are inherently independent of such intermediaries and usually also of many financial regulations, as they can take advantage of the decentralized nature of blockchain technology, offering even more freedom to project owners of innovative ventures (Gan, Tsoukalas, & Netessine, 2021). In ICOs, investors provide funds to the entrepreneurial venture in exchange for crypto tokens. This form of tokenized CF especially comes with low transaction costs and a worldwide investor outreach. Similar to CF, backers of the ICO project may receive, e.g., shares in the project, early use, or preferential rights to the eventual product (Chod & Lyandres, 2021; Lyandres et al., 2022).

ICOs have experienced a sometimes rapid upswing in recent years, even if interim incidents of fraud and the sharp fluctuations in the price of established cryptocurrencies such as *Bitcoin* or *Ethereum* put a significant damper on the steady growth. It is therefore all the more important to ensure credible signals in ICOs in order to reduce information asymmetries (Garratt & van Oordt, 2021; Holden & Malani, 2022; Momtaz, 2021). To provide a comprehensive overview of the signaling effect of recent entrepreneurial financing mechanisms, I link findings on characteristics of ICO project owners and their influence on project outcomes to the corresponding results of my quantitative analysis on CF. The qualitatively assessed innovation potential of ICOs, especially compared to CF, represents an additional question of this study.

My research offers several potential contributions. For practice in the context of entrepreneurial fundraising, my findings promise new insights for various stakeholder groups. In particular, fundraisers and potential investors as well as platform operators and policy-makers can derive added value from the proposed measures. For theory, my research expands signaling through human capital characteristics of CF and ICO project owners and the impact not only on success but also on innovation. This contributes to the existing literature on entrepreneurial fundraising in conjunction with information asymmetry and human capital signals.

The remainder of this paper is organized as follows: The subsequent Section 2 (*Theoretical Background*) sets basic terminology and the conceptual framework that serves to introduce and discuss the theories and theoretical mechanisms used. It also embeds the study into previous considerations and explains how value is added to the research topic. Section 3 (*Hypotheses*) lays out the hypotheses by positioning them in relation to existing research and by providing logical rationales for the chosen variables to investigate the theorized relationships. Thereafter, Section 4 (*Methods*) provides information on the methodology; this includes how and why the data was obtained, which measures were introduced and how the data was analyzed. The *Results* (Section 5) answer the research questions that have been posed and, depending on the empirical outcome, provide (lacking) evidence for the hypotheses. An interpretation of the results introduces the subsequent *Discussion* (*Section 6*), which is completed with the theoretical and practical implications as well as limitations and future research directions. Finally, the *Conclusion* (Section 7) summarizes the main results and findings from the discussion concisely.

7 CONCLUSION

This paper studies the impact of CF campaign owner characteristics on project perfor- mance, i.e., success and innovativeness, and sheds light on the comparatively new fundraising mechanism called ICO and its innovation potential. Based on data from 896 CF campaigns on *Indiegogo* and explained primarily by signaling theory, my findings show that project owner teams and experienced CF entrepreneurs are more likely to succeed, whereas real-name initia- tors are not. Moreover, against expectations, the number of previous campaigns is not a deter- mining factor for the degree of innovation of a future CF project. I then show that ICOs are a relevant alternative for highly innovative projects individually, i.e., at the micro level, and a potential disruptor for fundraising as a whole, i.e., at the macro level. These findings not only provide interesting implications for project owners and platform operators, but also open up fruitful research avenues for further comparison of fundraising mechanisms regarding their project owner characteristics and campaign performance. My study aims to contribute to the growing literature on CF and ICOs in conjunction with entrepreneurial success and innovative- ness, both of which are predominantly based on the widely accepted signaling theory.