




# (No) Time for Change: When and Why Entrepreneurs Act During Underperforming Fundraising Attempts

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**Abstract.** Entrepreneurs need to mobilize funds, but they do so under considerable uncertainty about resource holders' preferences, leading often to fundraising attempts that perform below entrepreneurs' aspirations. Past research has offered contrasting theorizing and evidence for why entrepreneurs then make changes to their product offering during such attempts as well as for why entrepreneurs refrain from taking such action. This paper develops and tests behavioral theory to reconcile this tension, explicating when and why entrepreneurs change their product offering during underperforming fundraising attempts. Specifically, we argue that entrepreneurs draw on three sources of information that are inherent to fundraising attempts and that inform the extent of their actions to change their product offering: the degree to which they perform below their own fundraising aspirations, the degree to which they fall below peer fundraising performance, and the time that remains until the deadline for the fundraising attempt. Longitudinal data on 576 fundraising campaigns (6,758 observations) published on the crowdfunding platform Kickstarter support our theory. By developing novel behavioral theory on when and why entrepreneurs take action during resource mobilization, we offer contributions to research on entrepreneurial resource mobilization, the crowdfunding literature, and the Behavioral Theory of the Firm.

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## Introduction

To survive and thrive, entrepreneurs must mobilize resources—that is, they must “assemble the resources used to execute on an opportunity” (Stevenson 1989; Shane 2003; Clough et al. 2019, p. 240). To do so, entrepreneurs engage in fundraising attempts in which they disclose their product offering to resource holders such as venture capitalists, crowds, or angel investors (Chen et al. 2009, Mollick 2014).<sup>1</sup> The entrepreneur's product offering is essential for resource holders' funding decisions (Franke et al. 2008, Petty and Gruber 2011), not least because the product offering significantly influences the

value created for customers (Priem 2007) and the economic prospects of a venture (Cooper 1988, Gimmon and Levie 2021). However, because entrepreneurs face considerable uncertainty about resource holders' preferences (Alvarez and Barney 2005, Townsend et al. 2018, Shepherd and Gruber 2021), their product offerings often do not match these preferences, and they struggle to raise funds (Eisenmann 2021, Statista.com 2021, Kollmann et al. 2022).

Resource mobilization research has focused on entrepreneurs' attributes and actions to explain the performance of fundraising attempts (Aldrich and Ruef 2018,

Clough et al. 2019, Colombo 2021). What is missing from this research is an explanation for why some entrepreneurs struggling to raise funds take action and change their product offering to varying extents, while others do not (e.g., Cornelius and Gokpinar 2020, Murray et al. 2020, Eisenmann 2021). For example, Evan Gruntz—an entrepreneur from our data who was trying to raise funds for the Ninja-themed video game *Project Tanuki* on the crowdfunding platform Kickstarter—faced significant fundraising gaps yet made no changes to the product offering. Evan’s response starkly contrasts with the response of entrepreneurs Jason and Nicole Stark, who made extensive changes to their product offering—adding new character classes, new platforms (e.g., Linux), and more avatars—when they struggled to raise funds for their video game *Ninja Pizza Girl* on Kickstarter.

Previous research—both on entrepreneurial resource mobilization (e.g., Murray et al. 2020) and entrepreneurship more generally<sup>2</sup> (e.g., Camuffo et al. 2020)—has provided contrasting explanations for why entrepreneurs take action and change their product offering during fundraising struggles, or refrain from taking such action. One stream of research argues that entrepreneurs use product-offering change to gauge the uncertain preferences of resource holders (Berglund et al. 2020, Bocken and Snihur 2020) and adjust their product offering accordingly (Cornelius and Gokpinar 2020, Fisher et al. 2020, Murray et al. 2020). Changes may result in a product offering that is more closely aligned with resource holders’ preferences, which can positively impact entrepreneurs’ fundraising outcomes (Petty and Gruber 2011, Cornelius and Gokpinar 2020, Murray et al. 2020, Wessel et al. 2022).

Other research, however, has argued that entrepreneurs avoid changing the product offering during fundraising attempts because such changes may have negative consequences. One explanation for the unattractiveness of change is that resource holders value commitment, consistency, and reliability in the product offering (Garud et al. 2014, Felin et al. 2020), and entrepreneurs may therefore expect that change could harm, rather than improve, fundraising performance. Furthermore, changes to the product offering may violate resource holders’ expectations (Hampel et al. 2020, Eisenmann 2021) and compromise a venture’s identity (Fisher and Kotha 2015), triggering resource holders to withdraw or withhold funds. Finally, entrepreneurs may decide not to change their product offering during fundraising attempts because it requires them to use their scarce financial resources (e.g., to purchase new equipment) and human resources (e.g., time, knowledge, and creativity), and any changes might take too long to have their desired effect (Bigelow et al. 2019, Eisenmann 2021).

Theory and related empirical evidence from prior research on whether entrepreneurs do or do not change their product offering during underperforming (i.e., performing below the entrepreneur’s aspirations) fundraising

attempts are thus conflicting, creating a theoretical tension within the resource mobilization literature. This tension is relevant when we consider the evidence from research showing that the product offering plays a significant role in a venture’s economic prospects (Cooper 1988, Gimmon and Levie 2021), and the central role that product-offering change has in many entrepreneurship theories (e.g., Camuffo et al. 2020) and practitioner guidelines (e.g., Ries 2011). Thus, the inability of the resource mobilization literature to explain such an important entrepreneurial action is a critical shortcoming. At the heart of this shortcoming is the lack of an explanation for how entrepreneurs act during underperforming fundraising attempts, given their uncertainty about resource holders’ preferences. To address this shortcoming, we investigate the following research question: *When and why do entrepreneurs change, or not change, their product offering during underperforming fundraising attempts?*

Answering this question about entrepreneurial behavior requires behavioral theory that explains when and why entrepreneurs change (or do not change) their product offering more or less extensively in the face of uncertainty and underperformance. To develop such theory, we follow Clough et al. (2019) and engage in consilience (Wilson 1998); that is, we integrate two established streams of behavioral research on change in response to underperformance into research on resource mobilization: First, we draw on research in the tradition of the Behavioral Theory of the Firm, which has firmly established when and why underperformance triggers change (e.g., Argote and Greve 2007, Gavetti et al. 2012, Lounsbury and Beckman 2015). Second, we draw on behavioral research on deadlines and time pressure. Most entrepreneurs face time constraints in their fundraising attempts (Cable and Shane 1997, Lévesque and Stephan 2020, Eisenmann 2021), and research on deadlines and time pressure argues that an important condition shaping actors’ behavior in the face of uncertainty and underperformance is the time they have available (Kunisch et al. 2017, Lehman et al. 2011). Thus, the time remaining during an underperforming fundraising attempt to reach the fundraising goal (i.e., the fundraising deadline proximity) is likely to be a critical contingency for entrepreneurs’ decisions about when and why to change their product offering. Integrating these established behavioral theories into resource mobilization research allows us to derive testable hypotheses about information that jointly shape the extent to which entrepreneurs change their product offering during an underperforming fundraising attempt: the degree to which entrepreneurs perform below their fundraising aspirations and the fundraising attempt’s deadline proximity. Our analysis of longitudinal data of 576 fundraising campaigns (6,758 observations) published on the crowdfunding platform Kickstarter—an environment where fundraising aspirations and deadlines are exogenous

and observable during fundraising attempts—supports our hypotheses.

This study contributes to research on entrepreneurial resource mobilization (e.g., Aldrich and Ruef 2018, Clough et al. 2019, Cornelius and Gokpinar 2020) by developing behavioral theory to explain entrepreneurial product-offering change during underperforming fundraising attempts. Our empirical setting also allows us to contribute to crowdfunding research (e.g., Murray et al. 2020). Finally, by introducing a temporal dimension to the Behavioral Theory of the Firm (Cyert and March 1963, Greve 1998, Gavetti et al. 2012, Kuusela et al. 2017), we extend this theory by arguing that the time actors have remaining to achieve their aspirations can explain their varied responses to unfulfilled aspirations.

## Theory

Entrepreneurs identify and exploit opportunities under conditions of uncertainty (Stevenson 1989, Shane and Venkataraman 2000). Since their own funds are often limited, entrepreneurs need to raise funds from resource holders such as venture capitalists (Franke et al. 2008), business angels (Huang and Pearce 2015), friends and family (Kotha and George 2012), or crowds (Mollick 2014, Murray et al. 2020) to grow and develop their ventures. How entrepreneurs assemble funds from resource holders has been studied extensively under the umbrella term “resource mobilization” (e.g., Mittermaier et al. 2022).<sup>3</sup> Resource mobilization covers how entrepreneurs identify resource holders and gain access to them (search stage), how they disclose their product offering to those resource holders to get funds and other resources from them (access stage), and how they finally transfer the resources into their own venture once the access stage is successfully completed (transfer stage) (Clough et al. 2019).

The access stage, in which entrepreneurs disclose their product offering to, for example, venture capitalists, business angels, or a crowd, has been studied extensively. Research so far has largely focused on explaining the antecedents of entrepreneurs’ fundraising success, including an extensive stream of research on how entrepreneurs’ attributes, such as their demographics, credibility, and qualifications (e.g., Alsos et al. 2006, Carpentier and Suret 2015, Ko and McKelvie 2018), affect fundraising outcomes. More-recent research has investigated how entrepreneurs’ actions—particularly during fundraising attempts—affect fundraising outcomes (e.g., Murray et al. 2020, Mittermaier et al. 2022). This research has shown, for instance, how entrepreneurs use actions such as community building, community spanning, and community engaging to raise funds (Murray et al. 2020). What this research indicates is that fundraising outcomes are not (only) shaped by the characteristics of the entrepreneur and their venture, but that entrepreneurs’ actions (or inactions) during such attempts shape fundraising outcomes as well (e.g., Petkova et al. 2013).

The entrepreneur’s product offering is an important determinant of resource holders’ funding decisions (Franke et al. 2008, Petty and Gruber 2011) and has significant effects for entrepreneurs, resource holders, and fundraising outcomes. Entrepreneurs usually disclose their product offering during fundraising attempts to attract resource holders’ attention, showcase the innate qualities of the product, and convince resource holders to provide resources (Petty and Gruber 2011, Steigenberger and Wilhelm 2018, Clough et al. 2019). Resource holders use the product offering to determine whether it aligns with their preferences (Wessel et al. 2022), and when it does not, entrepreneurs’ fundraising attempts underperform (Cornelius and Gokpinar 2020, Eisenmann 2021). One important reason why a product offering can be misaligned with resource holders’ preferences is that entrepreneurs are often uncertain about those preferences (Alvarez and Barney 2005, Townsend et al. 2018, Shepherd and Gruber 2021). To diminish this uncertainty, entrepreneurs commonly go through an epistemic process, “overcome[ing] [uncertainty] through the discovery of information about an in-principle knowable and independently existing environment” (Berglund et al. 2020, p. 828). Even if entrepreneurs can discover such information to overcome their uncertainty about resource holders’ preferences (Kerr et al. 2014), entrepreneurs still need to decide whether and when to act—by changing their product offering—to interest resource holders and thus access the needed funding (Chemla and Tinn 2020, Murray et al. 2020). Since entrepreneurs’ product offering is central to fundraising attempts (Franke et al. 2008, Petty and Gruber 2011), resource mobilization researchers (e.g., Cornelius and Gokpinar 2020)—and entrepreneurship researchers more generally (e.g., Eisenmann 2021)—have been interested in product-offering change.

Research in both the resource mobilization literature and the general entrepreneurship literature produced conflicting arguments for why entrepreneurs do or do not change their product offering during fundraising attempts. One argument, in the lean startup, agile entrepreneurship, and entrepreneurial hustle literatures (e.g., Ries 2011, Fisher et al. 2020, Shepherd and Gruber 2021), is that by continuously changing their product offering, entrepreneurs can gauge resource holders’ preferences (Berglund et al. 2020, Bocken and Snihur 2020). According to this argument, by persistently monitoring resource holder interest and adapting the product offering, entrepreneurs can develop a product offering that better fits resource holders’ preferences and thus overcome fundraising underperformance (Cornelius and Gokpinar 2020). Another argument favoring product-offering change during fundraising attempts claims that such change signals to resource holders that entrepreneurs can handle challenging circumstances, which may improve resource holders’ perceptions of them and thus help them overcome fundraising underperformance (Fisher et al.



2020). Empirical research on crowdfunding supports this line of argument, showing that product-offering change may help entrepreneurs overcome fundraising underperformance (Cornelius and Gokpinar 2020, Murray et al. 2020).

Other research, by contrast, explains why entrepreneurs avoid to change their product offering when fundraising attempts underperform, also providing strong theoretical rationales and supporting empirical evidence. One argument for refraining from product-offering change is entrepreneurs' worry that any changes will be seen as inconsistent with their past narratives and behavior and will alienate resource holders (Garud et al. 2014, Grimes et al. 2019, Hampel et al. 2020). To avoid alienating resource holders, entrepreneurs thus stick with their original product idea (Felin et al. 2020, Eisenmann 2021). A second argument for maintaining the product offering is entrepreneurs' limited resources, particularly time (Cable and Shane 1997, Lévesque and Stephan 2020). Since every change takes both effort and time—including the additional time it takes for the potential effects of change to materialize (Kunisch et al. 2017, Bigelow et al. 2019)—entrepreneurs may refrain from doing so to economize on scarce resources. Finally, research on entrepreneurship concepts such as hypotheses-testing (Camuffo et al. 2020) and pivoting (McDonald and Gao 2019, Kirtley and O'Mahony 2023) both imply that entrepreneurs do not change their product offering during fundraising attempts. Instead, this research suggests that entrepreneurs will make any changes to their product offer only after a fundraising attempt—potentially after it has become a lost cause (Camuffo et al. 2020, Eisenmann 2021, Piening et al. 2021).

While both lines of argument within these literatures provide valuable and plausible insights into entrepreneurs' behavior when their fundraising attempts are underperforming and they are uncertain about resource holders' preferences, the entrepreneurial actions they predict are conflicting and inconsistent, resulting in a tension in the literature. With one stream predicting more or less extensive product offering change during fundraising attempts and the other stream predicting entrepreneurs avoid change, we lack behavioral theory that explains when and why entrepreneurs change their product offering in the face of underperformance. Developing such theory is crucial for overcoming the noted theoretical tension in the resource mobilization literature.

### Behavioral Theory and Product-Offering Change During Fundraising Attempts

We develop behavioral theory that explains when and why entrepreneurs change their product offering during fundraising attempts. To do so, we draw on the Behavioral Theory of the Firm, which is a well-established theory to explain when and why actors operating under uncertainty initiate change in response to underperformance (e.g.,

Argote and Greve 2007, Gavetti et al. 2012, Lounsbury and Beckman 2015). The theory posits that actors initiate change—for example, alter their product (Greve 1998)—when their current performance falls short of internally anchored aspiration (e.g., performance goals) or externally anchored aspiration (e.g., peer performance) levels (Cyert and March 1963, Greve 1998), with aspiration levels defined as minimum satisfactory outcomes (Schneider 1992). Consistent with our argument on uncertainty, this theory acknowledges that actors do not know which changes will remedy a performance shortfall. Hence, actors engage in problemistic search: Small performance discrepancies will trigger search in the vicinity of the problem and result in limited change, while larger performance discrepancies trigger more-distant search and will lead to extensive change (Cyert and March 1963).

As stated above, the Behavioral Theory of the Firm posits that actors evaluate their performance by comparing it with an internally (goal-based) or an externally (peer-based) anchored aspiration level. In entrepreneurial resource mobilization, the fundraising goal is a particularly important aspiration level, as it defines the amount of funds that an entrepreneur needs to successfully develop and market the venture's product offering (Murray et al. 2020). The entrepreneurs in our qualitative data<sup>4</sup> confirmed this importance, with one interviewee stating: "We watched it [the level of funds raised] all the time." Other entrepreneurs explained that fundraising underperformance and making changes during fundraising attempts are linked: "[W]e realized, something is stagnating, something is not working. Then we also realized, 'We have to make some changes.'" A third interviewee stated, "If it's not working, then of course you need to try something else."

Entrepreneurs also compare their fundraising performance with the fundraising performance of close peers (Moliterno et al. 2014, Kostopoulos et al. 2023); that is, other entrepreneurs with similar products, goals, and timeframes. As an entrepreneur commented, "... when we weren't looking at our project [the fundraising campaign], we were constantly watching [others]: what's going on, how they are doing." Another interviewee added, "We always checked how other games [referring to other entrepreneurs seeking funds at the same time] were doing; [those] broadly in the same category." Such social comparison can also be relevant because resource holders might expect similar actors to perform similarly (Huang 2018, Fisher and Neubert 2023). The Behavioral Theory of the Firm is thus an appropriate theory that we can draw on to help us move toward resolving the theoretical tension that motivated our study, since it argues that entrepreneurs' responses to fundraising underperformance depend on the degree to which their fundraising aspirations have been fulfilled.

Missing from the Behavioral Theory of the Firm, though, is the element of time. The time that remains

during an underperforming fundraising attempt is likely an important boundary condition because actions and their effects take time (Lehman et al. 2011, Kunisch et al. 2017, Stouten et al. 2018), limited timeframes and deadlines are a highly salient feature of fundraising attempts (Cable and Shane 1997, Chen et al. 2008, Eisenmann 2021), and the pressure to act increases as the deadline approaches (for evidence from sport teams, see Lehman et al. 2011). When entrepreneurs have ample time left in a fundraising attempt—that is, deadline proximity is low—they can more feasibly make changes to the product offering and they will have sufficient time for product-offering changes to positively impact resource holders. When they have little time left—that is, deadline proximity is high—and their funding shortfall is large, entrepreneurs may very well give up on a fundraising attempt and instead start the resource mobilization process anew by identifying and approaching other resource holders, or give up on their product offering altogether. One entrepreneur we interviewed had just this response: “The moment you realize the project just doesn’t work, then you also realize that it won’t help to change the pitch. [At that point] there is nothing left to do.” We therefore argue that deadline proximity is a highly relevant contingency to explain entrepreneurs’ action, and that extending the Behavioral Theory of the Firm to include the ubiquitous feature of time pressure—as established in the behavioral literature on deadlines and time pressure—is therefore important for explaining entrepreneurs’ actions during underperforming fundraising attempts.

We next derive hypotheses that expand on these two established streams of behavioral research to explain when and why entrepreneurs change their product offering during fundraising attempts in response to unfulfilled fundraising aspirations.

**Hypotheses Development**  
**Fundraising Performance Below the Goal-Based Aspiration Level and Subsequent Change.** We argue that the relation between fundraising performance below an entrepreneur’s goal-based aspiration level and the extent of subsequent change in the product offering follows an inverted U-shaped pattern. This inverted U-shape results from two additive effects: first, a problemistic search effect—as established in the Behavioral Theory of the Firm—and second, a lost-cause effect—which results from the costs and risks entrepreneurs face when changing their product offering during fundraising attempts. We submit that one of these two effects dominates depending on how far below entrepreneurs’ fundraising performance is from their goal-based aspiration level at a given point in time.

The Behavioral Theory of the Firm suggests that firms performing below their aspirations engage in problemistic search and subsequent change in order to decrease the gap between performance and aspirations (Cyert and March 1963, Gavetti et al. 2012). The theory further

suggests that the larger the gap, the stronger the incentive to engage in activities to remedy this discrepancy, which leads to more-distal and more-radical problemistic search (Posen et al. 2018), greater risk propensity and risk-taking (Greve 2003a), and thus more-ambitious (Greve 1998) and more-extensive change (Eggers and Suh 2019). This reasoning would suggest a linear relationship between performance below an entrepreneur’s goal-based aspiration level during fundraising attempts and the extent of change in the product offering.

However, we propose that when the performance falls considerably below the goal-based aspiration level, entrepreneurs will increasingly perceive the fundraising attempt as a lost cause and, accordingly, will decrease—instead of increase—the extent of product-offering changes. We offer two rationales for this behavior. First, as outlined above, changing the product offering is costly because it often requires money (e.g., to buy new equipment) or human effort (e.g., time, knowledge, and creativity), and invokes psychological costs (e.g., the anxiety it induces might reduce work efficiency) (Piderit 2000). Because entrepreneurs are typically resource-constrained, they have a strong incentive to avoid committing themselves to change that does not have a strong likelihood of helping them reach their fundraising goal and results in wasted effort and increased costs. An increasingly large shortfall also increases the probability that the entrepreneur will not meet goal-based aspirations of a given fundraising attempt, even if the entrepreneur does change the product offering.

A second rationale for a decreased extent of change is that when the gap between the fundraising goal and the current fundraising performance becomes large, the threat of failure increasingly induces stress. Actors commonly respond to such negative prospects by avoiding search and change and reducing risk (Staw et al. 1981, Shimizu 2007, Greve 2011). We propose that this avoidance response also applies to entrepreneurs, such that entrepreneurs that are far from their fundraising goal will shy away from change in the product offering. Therefore, we expect that the larger the gap between the goal-based aspiration level and current fundraising performance becomes, the less entrepreneurs will change their product offering.

In sum, we propose two counteracting effects: a problemistic search effect that leads to a linear increase in the extent of change in the product offering when the fundraising performance falls below the goal-based aspiration level and a lost-cause effect that reduces the extent of change when fundraising performance falls considerably below the goal-based aspiration level. Together, these effects suggest an inverted U-shaped relationship. Thus, we argue:

**Hypothesis 1.** *Fundraising performance below the goal-based aspiration level exhibits an inverted U-shaped relationship with the extent of change in the product offering.*

**Deadline Proximity Moderates the Relationship Between Fundraising Performance Below the Goal-Based Aspiration Level and Subsequent Change.** We argue that the curvature of the inverted-U relationship proposed in Hypothesis 1 is contingent on fundraising deadline proximity, such that the lost-cause effect in the relation between fundraising performance below goal-based aspiration levels and subsequent change will become more pronounced as deadline proximity increases (i.e., as the deadline nears). Multiple arguments support this reasoning. First, it takes time for change to take effect (Kunisch et al. 2017, Stouten et al. 2018), and running out of time makes change increasingly unattractive. When searching for ways to change the product offering, entrepreneurs—similar to managers in established organizations—must make sense of their environment, develop new ideas that are consistent with the core features of the product, and create a change plan, all of which take time (Balogun et al. 2015). Once a plan has been developed, it must then be implemented, which is also time-consuming (Stensaker and Falkenberg 2007). Hastening the process might reduce the quality of the change, which increases the risk that a product offering will appear inconsistent to resource holders (Garud et al. 2014, Grimes et al. 2019, Hampel et al. 2020). Moreover, a hastened process also increases the cost of implementation due to time-compression diseconomies (Pacheco-de-Almeida and Zemsky 2007). Finally, a fast-approaching fundraising deadline leaves less and less time for any changed product offering to positively affect resource holders' evaluations and funding decisions. In sum, the less time entrepreneurs have until the fundraising deadline, the less likely they will be able to devise and implement change that will successfully remedy a fundraising performance shortfall. These mechanisms strengthen the lost-cause effect and imply that when deadline proximity increases and fundraising performance is well below the goal-based aspiration level, entrepreneurs will change the product offering less.

Relatedly, increased deadline proximity adds the stressor of time pressure, amplifying threat-rigidity effects (Staw et al. 1981) associated with fundraising performance below the goal-based aspiration level. In consequence, the more proximate the deadline, the more entrepreneurs will look for confirmatory information (Tversky and Kahneman 1979, Shimizu 2007, Greve 2011), reduce risk (Lehman et al. 2011), limit search (Osiyevskyy and Dewald 2018), and constrict control (Staw et al. 1981, Ocasio 1995), all of which suggest that they will decrease the extent of change in the product offering during their fundraising attempt.

We therefore propose:

**Hypothesis 2.** *Deadline proximity moderates the inverted U-shaped relationship between fundraising performance below the goal-based aspiration level and the extent of*

*change in the product offering, such that increases in deadline proximity weaken this relationship.*

**Fundraising Performance Below the Social Aspiration Level and Subsequent Change.** We argue that fundraising performance slightly below the social aspiration level—that is, below the fundraising performance of a close peer—will have only limited impact on the extent of change in the product offering because entrepreneurs have incentives to ignore small performance shortfalls vis-à-vis peers, as they can easily attribute them to unalterable, unobservable, or idiosyncratic circumstances (Joseph and Gaba 2015). Similarly, resource holders may regard small gaps between the performance of a focal entrepreneur and a close peer as insignificant. Even if they do consider them to be significant, resource holders will have difficulty assessing the relevance of a small funding gap for their funding decision (Harrison et al. 2010). Thus, a small discrepancy between a focal entrepreneur's fundraising performance and the fundraising performance of a close peer will not incentivize entrepreneurs to change the product offering.

By contrast, when an entrepreneur's fundraising is performing considerably below that of a close peer, the entrepreneur will experience disproportionate pressure to reduce this discrepancy by initiating problemistic search and will eventually change the product offering (Greve 1998, Bromiley and Harris 2014, Kim et al. 2015). When the performance discrepancy vis-à-vis a close peer passes a certain threshold, entrepreneurs will find it increasingly difficult to attribute fundraising performance shortfalls to idiosyncratic circumstances. Resource holders are also likely to respond negatively to considerable performance discrepancies by withholding funds (Mezias et al. 2002, Bitektine et al. 2020). In this situation, the entrepreneur thus has strong incentives to change the product offering.

Social comparisons also provide entrepreneurs with valuable information (Posen and Chen 2013). Falling substantially below the fundraising performance of a close peer indicates that the fit between the product offering and resource holders' preferences is worse than that of the peer. Since the entrepreneur and the peer are often competing for funds from the same resource holders, entrepreneurs have an incentive to respond when their performance is considerably below their social aspiration level. Changing the product offering may make the product more attractive to resource holders (Cornelius and Gokpınar 2020) and thus close the fundraising gap between a focal entrepreneur and the better-performing peer. An entrepreneur raising funds—irrespective of the gap between current fundraising performance and the predetermined financial goal—will therefore be incentivized to change the product offering when a close peer performs substantially better because the performance gap signals to both the



entrepreneur and resource holders that there is room for improvement.

Taken together, these effects imply a nonlinear relationship with a threshold between fundraising performance below the social aspiration level and the extent of change in the product offering. We therefore argue:

**Hypothesis 3.** *Fundraising performance below the social aspiration level has an increasing effect on the extent of change in the product offering. To a certain threshold, fundraising performance that is below the social aspiration level has a weak impact on the extent of change, while beyond this threshold it has a strong impact.*

**Deadline Proximity Moderates the Relationship Between Fundraising Performance Below the Social Aspiration Level and Subsequent Change.** Finally, we argue that the relationship proposed in Hypothesis 3 will be contingent on fundraising deadline proximity. As deadline proximity increases (i.e., the deadline draws closer), fundraising performance below the social aspiration level will have a smaller effect on the extent of change in the product offering.

Entrepreneurs—for the reasons explained above—have incentives to respond to fundraising performance well below the social aspiration level. However, the value they derive from change induced by performance below the social aspiration level is contingent on deadline proximity because change is risky, costly (Kuusela et al. 2017), and time-consuming (Kunisch et al. 2017), as we argued in support of Hypothesis 2. The closer the deadline, the less likely it is that they have enough time to identify promising solutions and implement change during their fundraising attempt. Furthermore, the closer the deadline, the more entrepreneurs will have to hasten the change process, which may result in a product offering that appears inconsistent to resource holders (Garud et al. 2014, Grimes et al. 2019, Felin et al. 2020, Hampel et al. 2020). These arguments imply that as deadline proximity increases, entrepreneurs will increasingly refrain from responding to fundraising performance below the social aspiration level. We therefore propose:

**Hypothesis 4.** *Deadline proximity moderates the relationship between fundraising performance below the social aspiration level and the extent of change in the product offering, such that increases in deadline proximity weaken the relationship.*

Figure 1 summarizes our model.

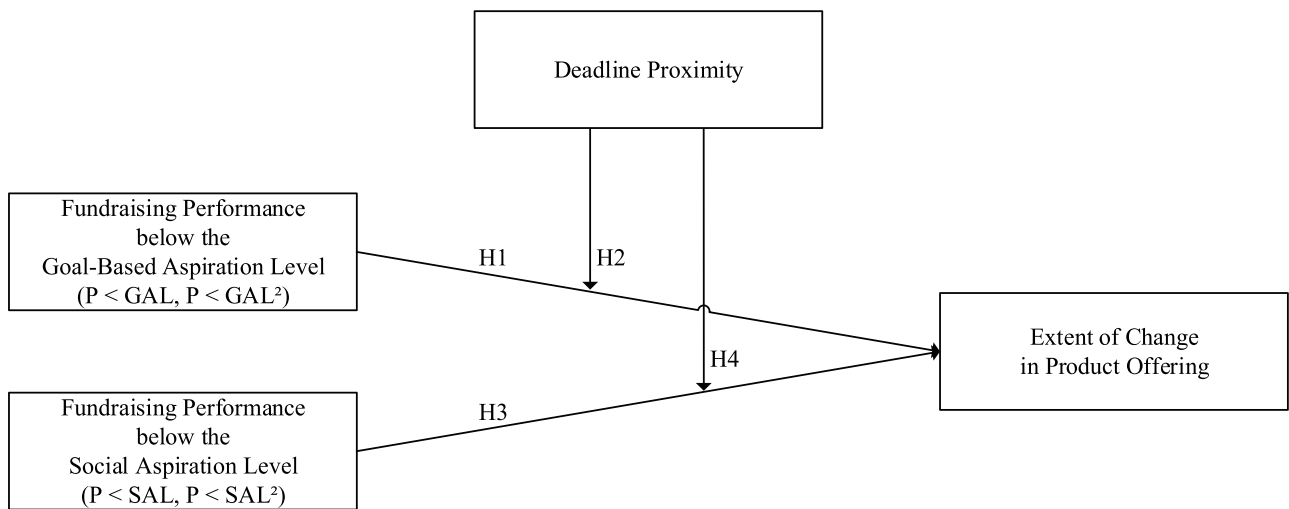
## Data and Methods

### Study Context

We tested our hypotheses using unique longitudinal data on fundraising campaigns published on the online crowdfunding platform Kickstarter ([www.kickstarter.com](http://www.kickstarter.com)). With more than 20 million visitors per month in 2022, Kickstarter is one of the largest

online crowdfunding platforms and allows entrepreneurs to raise funds for consumer-related product development (e.g., video games, music, electronic devices, and fashion). Kickstarter has been frequently used as a data source in research on entrepreneurial resource mobilization (e.g., Courtney et al. 2017, Kuppuswamy and Bayus 2017, Manning and Bejarano 2017) and organization research (e.g., Leung and Sharkey 2014, Soublière and Gehman 2020).

The characteristics of crowdfunding campaigns on Kickstarter are favorable for our hypotheses testing. In general, crowdfunding is an established setting to study how entrepreneurs mobilize resources under uncertainty (e.g., Chemla and Tinn 2020, Xu and Ni 2022), thus matching the premise of our study. Kickstarter allows entrepreneurs to raise a predefined amount of funds within a predetermined time frame (typically 30 days), implying both a stated fundraising goal and a deadline. Once a campaign has started, neither the amount of money requested by the entrepreneur nor the deadline can be changed, rendering the fundraising goal and the deadline exogenous to our model. If the goal is not achieved by the deadline, the entrepreneur receives no money, underlining the relevance of the deadline. Kickstarter thus presents an extreme context in terms of fundraising goals and deadlines, as entrepreneurs in other resource mobilization settings (e.g., family and friends) may change both during fundraising attempts (a notion we come back to in the Discussion section). In line with the contrasting arguments on entrepreneurial change action during fundraising attempts, the extent of change in the product offerings varies substantially during and across crowdfunding campaigns. Some entrepreneurs change their product offering frequently and extensively, while others do not. In our data set, we found that 67% of the entrepreneurs made changes of various extent to their product offerings during their crowdfunding campaigns. Fundraising performance below goal-based and social aspiration levels also varied. For example, while approximately 80% of the campaigns in our data failed to reach their goal, only 2% of campaigns attracted zero pledges. Since resource holders may add or withdraw pledges during the campaign, entrepreneurs are motivated to respond to performance shortfalls throughout the fundraising attempt. Because Kickstarter is an online environment, entrepreneurs (and researchers) can clearly and easily identify, observe, and monitor all relevant variables, in particular entrepreneurs' performance in relation to their goal as well as peer performance, all in relation to the respective campaigns' deadlines. Crowdfunding thus provides an excellent setting to test hypotheses on entrepreneurial action during fundraising, linking performance below aspiration levels, deadline proximity, and the extent of change in the product offering.

**Figure 1.** Conceptual Model

### Data Collection

Our sample includes all 583 campaigns for video-game development (i.e., games for gaming consoles or personal computers) with a minimum goal of US\$25,000 that were published on Kickstarter between September 2013 and early November 2014. Our start date was arbitrary, but coverage within the time frame is exhaustive. To reduce heterogeneity between campaigns, we followed previous research (e.g., Xu and Ni 2022) and focused on a single category within Kickstarter: video games, which is one of the largest categories (Statista.com 2023). This focus allowed us to derive a valid measure for product-offering change and provided us with a sufficiently large data set for the analysis.

We applied a minimum goal of US\$25,000 because our theorizing relates to for-profit entrepreneurial ventures, not hobby projects. The distinction between hobbyists and for-profits is common in Kickstarter research, recognizing that hobbyists on Kickstarter typically have different motivational structures, resources, and incentives (Mollick 2014, Calic and Mosakowski 2016, Steigenberger and Wilhelm 2018). A common way to exclude hobby projects is with a campaign goal cutoff. A US\$25,000 cutoff point accounts for the minimum level of professional product-development costs in the industry, since developing for-profit products in this industry for less is practically impossible (Gameindustry.biz 2011, Honorof 2013).

As our research focuses on the extent of change in the product offering as a response to performance below aspirations at specific points in time—and because instances of change in the product offering cannot be reconstructed after crowdfunding campaigns have concluded—we could not run a single data scrape, as most previous research using Kickstarter data has done

(e.g., Mollick 2014, Anglin et al. 2018). Instead, we needed to collect data on each campaign in real time. We therefore saved observations of each campaign in the video-game section of Kickstarter three times a week, resulting in a longitudinal data set with 8,050 observations of 583 campaigns (i.e., approximately 14 observations per campaign). As campaigns exceeding their fundraising goal—that is, performing above the goal-based aspiration level—commonly changed the product offering because of stretch goals—that is, features to be added to the product at specific levels above the goal—we follow earlier research (e.g., Tyler and Caner 2016, Allen et al. 2021, Piening et al. 2021) and included all observations of campaigns as long as they had not exceeded their goal. We ran additional analyses demonstrating that our results remain robust even when we include above-goal observations, which we report in the Online Appendix, Additional Analyses I and II.

Initial data screening using Stata's *bacon* (Weber 2010) revealed 16 outlier observations. We found that 12 outliers were observations of the campaign *Cedaria: Blackout* (out of 17 observations available for this campaign), representing extreme values of fundraising performance below social aspiration levels. These outliers resulted from the outsized positive fundraising performance of a peer campaign, *Hyper Light Drifter*, which exceeded its goal by a factor of 1.5 on its first day. Similarly, the other four outlier observations (one from each campaign: *Ter-rayn*, *Pantheon*, *World Defense*, and *Eternal Wanderer*) were also caused by extreme values of fundraising performance below social aspiration levels. To avoid biased estimates, we removed these 16 observations.

To ensure temporal precedence of our independent variables relative to our dependent variable (Aguinis and Edwards 2014), we lagged our independent variables



by one observation. Our final sample thus covers 6,758 observations of 576 campaigns.

## Variables

**Extent of Change in Product Offering (Extent of Change).** Following prior research (e.g., Joseph and Gaba 2015, Kostopoulos et al. 2023), we measured our dependent variable by coding the extent of substantive change in the product offering between two subsequent observations of a given campaign. We defined substantive changes as those that involved an alteration of the look, feel, or technology of the video game as published on Kickstarter (e.g., adding a new character to the game). This definition is consistent with our theorizing, as these changes require processes of problemistic search. For example, introducing a new character to a video game requires the entrepreneur to assess current weaknesses in the game, create a new character, develop backstory and visualization, and then implement this character into the product offering in a way that brings these benefits to the fore (GameDesign 2018). In the Additional Analysis section below, we demonstrate that our results are largely robust to an alternative entrepreneurial action in response to fundraising underperformance; namely, changes to the crowdfunding process.

We measured the *extent of change* on a scale ranging from no change (0) to major changes (5). To identify the extent of change, we developed a codebook that provided conceptual definitions and empirical illustrations for each of the different levels of the *extent of change*. Developing the codebook required multiple iterations of going back and forth between data and codebook to account for all possible instances of change. We stopped this process once we reached a point of saturation (i.e., coding additional instances of change did not result in further modifications of the codebook). To ensure that the codebook was understandable and comprehensible, we ran extensive tests with five coders. These test runs resulted in minor clarifications to the codebook.

Our second step was to code the raw data. We trained four research assistants who were blind to our theorizing and hypotheses how to understand and use the codebook. To ensure thorough work, each of the 6,758 observations was independently coded by two coders. Once the initial independent coding run was complete, we resolved inconsistent ratings by asking the coders to reference the codebook and discuss and resolve differences. An excerpt from our codebook, examples from our data, and coding results are presented in Online Appendix Table A.1.

**Fundraising Performance Below Goal-Based Aspiration Level ( $P < GAL$ ).** The fundraising goal is the predetermined US dollar amount the crowdfunding campaign sought to raise. To measure fundraising performance below the goal-based aspiration level ( $P < GAL$ ), we used

the funding ratio of campaign  $i$  at time  $t$  ( $\text{Funding}_{i,t} / \text{Fundraising Goal}_i$ ). In line with past research (Greve 1998, Lehman et al. 2011), we subtracted 1 from this value. Thus, this measure is 0 when the goal has been reached and equals the funding ratio minus 1 when the goal has not been reached.

**Fundraising Performance Below Social Aspiration Level ( $P < SAL$ ).** Traditionally, researchers have used industry performance averages to capture the social aspiration level (e.g., Greve 1998). More recently, researchers have stressed the need for more-fine-grained measurements of the social aspiration level, with evidence suggesting that firms usually choose more-specific comparisons, such as comparison with peers instead of industry averages (Labianca et al. 2009, Washburn and Bromiley 2012, Moliterno et al. 2014). This consideration is particularly relevant for entrepreneurs attempting to raise funds because industry averages fail to account for entrepreneurs' predetermined goals and fixed end dates. Comparisons with entrepreneurs who have different goals do not provide relevant information. Therefore, a more-specific measure of the social aspiration level is needed (see also Online Appendix, Additional Analysis III).

Following previous research (Moliterno et al. 2014, Eggers and Kaul 2018) and insights from our interviews, we developed a context-specific measure for the social aspiration level. In line with our theorizing, we used as the focal entrepreneur's reference point for social aspirations the most-similar peer who sought funding for a video game on the Kickstarter platform during the same time. This measurement is consistent with the idiosyncratic nature of entrepreneurial fundraising derived from entrepreneurs' unique combination of product, goal, and end date. It is also in line with the more-general notion that firms pay selective attention to peers (Short and Palmer 2003) and select aspiration metrics that are meaningful in their specific situation (Bromiley and Harris 2014) based on their respective attention focus (Ocasio 1997). We also found direct support for this notion in our interviews.<sup>5</sup>

Based on this rationale, we measured  $P < SAL$  in two steps. First, to establish similar peers in the relevant dimensions, we calculated the Euclidian distances between all campaign observations at a specific point in time (e.g., all campaigns that were seeking funds on September 9, 2013). We derived the dimensions for calculating these distances from crowdfunding research (e.g., Smith 2015, Courtney et al. 2017). They cover the following easily observable campaign characteristics: game genre (based on game category—simulation, strategy, action, role play), fundraising goal, and time remaining (as a percentage). To ensure comparability between dimensions, we normalized each dimension (scale 0 to 1). Because we have no theoretical or empirical reason to

assume that some of these dimensions are more relevant to entrepreneurs than others, we weighted all dimensions equally. The more similar campaigns were on these dimensions, the lower the distance score (see Online Appendix, Additional Analysis IV, demonstrating the robustness of our results for three alternatively weighted specifications of the  $P < SAL$  measure).

Second, for the peer with the lowest distance score, we calculated the difference between the funding ratio of the focal entrepreneur's campaign and the peer's funding ratio. Consistent with past research grounded in the Behavioral Theory of the Firm (Greve 1998, Lehman et al. 2011, Bromiley and Harris 2014), this measure takes the value 0 when the funding ratio was at or above the funding ratio of the closest peer at the same point in time. If the focal campaign's fundraising performance was below that of the closest peer at that point in time, this variable equals the funding-ratio difference between the focal campaign and the campaign of the closest peer. For example, if a focal campaign had reached 20% of its fundraising goal and on the same day the closest peer campaign had reached 30%, the variable value would be  $-0.1$ . If a focal campaign had reached 80% of its fundraising goal on the same day the closest peer campaign reached 300%, the variable value would be  $-2.2$ .

**Deadline Proximity.** We measured *deadline proximity* by dividing the number of days for which the campaign had been active by the total number of days of the campaign (see Online Appendix, Additional Analysis V, demonstrating the robustness of our results when using an alternative measure).

**Control Variables.** Following previous research (e.g., Tauscher et al. 2021), we controlled for seasonal effects by including *time dummies* (year/month). In addition, some campaigns were more prominently presented on the Kickstarter web page than others, which might have affected both fundraising performance and subsequent change. To control for this effect, we introduced a dummy variable capturing whether a campaign was visible on the Kickstarter *front page* at the time of observation or not. We did not consider control variables that did not change over time because we employ fixed-effects models that predict changes within campaigns, as explained below.

### Analytical Approach

We estimated our models using Stata's *xtreg* with robust standard errors clustered at the campaign level. To rule out that time-invariant unobserved campaign-related variables (e.g., entrepreneur's professional training) caused inconsistent estimates, we used the fixed-effects estimation method (Wooldridge 2012).<sup>6</sup> As Hausman tests cannot be used for robust estimators of standard errors, we rejected random-effects estimation (Sargan-

Hansen statistic: 72.47;  $p = 0.00$ ) by running a test of over-identifying restrictions using *xtoverid* (Schaffer and Stillman 2010). To decide whether our model should account for autocorrelation, we used Stata's *xtserial* (Wooldridge 2002). We could not reject the null hypotheses of no first-order autocorrelation at  $p < 0.05$ , suggesting that autocorrelation does not present an issue. To ensure the robustness of our results, we ran additional analyses (reported in Endnote 6 and the Online Appendix, Additional Analyses I–V). As entrepreneurs could also take actions other than making changes to the product offering when responding to fundraising underperformance, we also ran an additional analysis using an alternative dependent variable (reported in the Additional Analysis section below).

## Results

Table 1 depicts descriptive statistics and zero-order correlations. Variance inflation factors (VIFs) do not raise multicollinearity concerns, as the VIF mean (2.56) is below the commonly applied threshold of 10. Removing *time dummy: 2014/4*—the variable with the highest VIF (3.96)—from our model provides results virtually identical to the ones reported below.

Table 2 presents the results of our analysis. Model 1 includes only control variables. Because excluding significant higher-order interaction terms can bias estimations of lower-order terms (Aiken and West 1991, Jaccard and Turrissi 2003), we introduce the lower-order interaction terms (reflecting Hypotheses 1 and 3) simultaneously with the respective higher-order interaction terms (reflecting Hypotheses 2 and 4). Therefore, Model 2 introduces the terms related to Hypotheses 1 and 2, while Model 3 introduces the terms related to Hypotheses 3 and 4. Model 4 presents the full model. As evident from Table 2, our results are consistent across all models. Because Model 4 provides the most-conservative test, we used this model to test our hypotheses.

Hypothesis 1 states that fundraising performance below the goal-based aspiration level exhibits an inverted U-shaped relationship with the extent of change in the product offering. Table 2 (Model 4) provides initial support for this hypothesis, as demonstrated by the significant negative effect of  $P < GAL^2$  ( $b = -2.13, p = 0.05$ ) on the *extent of change*. A dedicated test is provided by *utest* (Lind and Mehlum 2010), which supports an inverted U-shaped effect ( $t$ -value = 1.55,  $p = 0.06$ ). Thus, Hypothesis 1 is supported by our data. Going beyond our hypothesis, this test reveals that the extreme point of the inverted U shape is about halfway ( $-0.54$ ) between performing far below the fundraising goal-based aspiration level ( $-1$ ) and meeting the aspiration level ( $0$ ). This result shows that the most-extensive changes were made to the product offering when entrepreneurs had reached about 50% of their fundraising goal.

**Table 1.** Descriptive Statistics and Correlations

Variable	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)		
(1) 2013/9	0.03	0.18																					
(2) 2013/10	0.07	0.26	-0.05																				
(3) 2013/11	0.09	0.29	-0.06	-0.09																			
(4) 2013/12	0.05	0.22	-0.04	-0.07	-0.07																		
(5) 2014/1	0.05	0.21	-0.04	-0.06	-0.07	-0.05																	
(6) 2014/2	0.07	0.25	-0.05	-0.07	-0.08	-0.06	-0.06																
(7) 2014/3	0.08	0.28	-0.05	-0.08	-0.09	-0.07	-0.08	-0.08															
(8) 2014/4	0.11	0.31	-0.06	-0.10	-0.11	-0.08	-0.09	-0.10	-0.10														
(9) 2014/5	0.11	0.31	-0.06	-0.10	-0.11	-0.08	-0.09	-0.10	-0.10	-0.12													
(10) 2014/6	0.08	0.27	-0.05	-0.08	-0.09	-0.07	-0.06	-0.08	-0.09	-0.10	-0.10												
(11) 2014/7	0.07	0.25	-0.05	-0.08	-0.08	-0.06	-0.06	-0.07	-0.08	-0.09	-0.09	-0.08											
(12) 2014/8	0.08	0.27	-0.05	-0.08	-0.09	-0.07	-0.06	-0.08	-0.09	-0.10	-0.10	-0.09	-0.08										
(13) 2014/9	0.09	0.28	-0.06	-0.09	-0.10	-0.07	-0.07	-0.08	-0.09	-0.11	-0.11	-0.09	-0.08	-0.09									
(14) 2014/10	0.03	0.18	-0.03	-0.05	-0.06	-0.04	-0.04	-0.05	-0.06	-0.06	-0.06	-0.05	-0.05	-0.06	-0.06								
(15) 2014/11	0.00	0.02	0.00	0.00	-0.01	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	0.00	-0.01	0.00	0.00							
(16) Front page	0.11	0.31	-0.02	-0.02	0.09	0.08	-0.01	0.10	0.08	-0.05	-0.06	-0.06	-0.04	-0.02	-0.03	-0.04	-0.01						
(17) P < GAL	-0.86	0.21	-0.01	-0.02	0.03	0.00	-0.04	-0.06	-0.02	0.01	0.01	-0.01	0.01	0.05	0.03	-0.03	-0.01	0.23					
(18) P < SAL	-0.18	0.40	0.02	0.00	0.03	-0.02	0.01	-0.04	-0.01	0.00	0.00	-0.03	-0.03	0.00	0.03	0.04	0.01	0.07	0.11				
(19) Deadline proximity	0.45	0.29	-0.11	-0.02	-0.01	0.11	-0.07	-0.01	-0.03	-0.02	-0.01	0.02	0.02	-0.04	0.00	0.19	0.03	-0.06	0.18	-0.14			
(20) Extent of change	0.41	1.06	0.00	-0.03	0.06	-0.01	0.04	0.00	0.00	-0.02	0.01	-0.02	0.01	0.02	-0.02	-0.07	-0.01	0.11	0.16	0.04	0.04		

Notes. N (Campaigns) = 576; N (Observations) = 6,758. Correlations larger than |0.02| are significant at  $p < 0.05$ . Variables (1) to (19) are lagged by one observation.

Hypothesis 2 states that deadline proximity moderates the inverted U-shaped relationship between fundraising performance below the goal-based aspiration level and the extent of change in the product offering, such that increases in deadline proximity weaken the impact that fundraising performance below the goal-based aspiration level has on the extent of change. Table 2 (Model 4) provides initial supportive evidence for this hypothesis, as demonstrated by the significant effects of  $P < GAL \times deadline\ proximity$  ( $b = 3.91, p = 0.03$ ) and  $P < GAL^2 \times deadline\ proximity$  ( $b = 3.01, p = 0.02$ ) on the extent of change. Table 3 shows that the effect of  $P < GAL$  on the extent of change at low deadline proximity (mean  $-1$  SD)—up until  $P < GAL = -0.40$ —is significantly larger than for high deadline proximity (mean  $+1$  SD). For  $P < GAL$  larger than  $-0.40$ , there is no significant difference between the respective effects. Overall, our data provide supportive evidence for Hypothesis 2. Figure 2 illustrates this result.

Hypothesis 3 states that fundraising performance below the social aspiration level has an increasing effect on the extent of change in the product offering, such that up to a certain threshold, fundraising performance that is below the social aspiration level has a weak impact on the extent of change, while beyond this threshold it has a strong impact. Table 2 (Model 4) provides initial supportive evidence: The significant coefficients of  $P < SAL$  ( $b = 0.45, p = 0.02$ ) and  $P < SAL^2$  ( $b = 0.22, p = 0.03$ ) suggest a shape that eventually becomes steeper as  $P < SAL$  becomes more negative. Table 4 shows positive and significant simple effects that increase as  $P < SAL$  decreases, supporting our claim that fundraising performance below the social aspiration level increases the extent of change. Supporting our claim on nonlinearity, Table 4 shows that the effects of  $P < SAL$  on the extent of change remain below  $b = 0.46$  ( $p = 0.00$ ) up to  $P < SAL = -2$ . The effects only get stronger once  $P < SAL$  exceeds this threshold, and it nearly doubles to  $b = 0.87$  ( $p = 0.01$ ) for the minimum value ( $-3.39$ ) of  $P < SAL$ . Thus, our data support Hypothesis 3.

Hypothesis 4 states that deadline proximity moderates the relationship between fundraising performance below the social aspiration level and the extent of change in the product offering, such that increases in deadline proximity weaken the impact of fundraising performance below the social aspiration level on the extent of change. Table 2 (Model 4) provides initial support for this hypothesis, as demonstrated by the significant effects of  $P < SAL \times deadline\ proximity$  ( $b = -0.53, p = 0.04$ ) and  $P < SAL^2 \times deadline\ proximity$  ( $b = -0.28, p = 0.04$ ) on the extent of change. Table 5 shows that simple effects for  $P < SAL$  on the extent of change at low deadline proximity (mean  $-1$  SD) result in significantly larger effects than for high deadline proximity (mean  $+1$  SD). Thus, Hypothesis 4 is supported by our data. Figure 3 illustrates this result.



**Table 2.** Results

Independent variables	DV Extent of change											
	Model 1			Model 2			Model 3			Model 4		
	Coeff.	Robust SEs	<i>p</i>	Coeff.	Robust SEs	<i>p</i>	Coeff.	Robust SEs	<i>p</i>	Coeff.	Robust SEs	<i>p</i>
Intercept	1.21	0.21	0.00	−0.25	0.61	0.68	0.07	0.28	0.79	−0.23	0.61	0.70
Time-dummies	Included			Included			Included			Included		
Front page	0.12	0.09	0.17	0.07	0.09	0.47	0.09	0.09	0.34	0.07	0.09	0.47
$P < GAL$				−2.33	1.49	0.12				−2.31	1.49	0.12
$P < GAL^2$				−2.17	1.09	0.05				−2.13	1.08	0.05
$P < SAL$							0.47	0.20	0.02	0.45	0.20	0.02
$P < SAL^2$							0.23	0.11	0.03	0.22	0.11	0.03
Deadline proximity				0.47	0.67	0.48	−0.46	0.07	0.00	0.46	0.67	0.49
$P < GAL \times$ deadline proximity				3.97	1.81	0.03				3.91	1.80	0.03
$P < GAL^2 \times$ deadline proximity				3.10	1.23	0.01				3.01	1.23	0.02
$P < SAL \times$ deadline proximity							−0.53	0.26	0.04	−0.53	0.26	0.04
$P < SAL^2 \times$ deadline proximity							−0.28	0.14	0.05	−0.28	0.14	0.04
Observations		6,758			6,758			6,758			6,758	
Campaigns		576			576			576			576	

Notes. Two-tailed tests. Robust standard errors clustered at the campaign-level.

### Additional Analysis: Alternative Dependent Variable

To test the generalizability of our results to different types of change an entrepreneur might engage in, we reran our models using an alternative dependent variable that captures other relevant changes entrepreneurs can make during fundraising attempts. In addition to product-offering change, entrepreneurs can change in at least two additional dimensions in order to make their product offering more attractive to potential resource providers. They can change the development process (e.g., adding a new team member to the entrepreneurial venture) and the crowdfunding process (e.g., adding a new payment option). Our theorizing would be more generalizable if we found consistent results irrespective of the particular type of action used as a dependent variable.

Since there were very few instances of change related to the development process in our sample (e.g., only four instances in the highest-change category), we were unable to use this variable for the test. However, we could test our models with *crowdfunding-process-related*

*change* as the dependent variable. First, we note that the *extent of change* in the product offering and the *extent of crowdfunding-process-related change* are correlated ( $r = 0.52, p = 0.00$ ), indicating that entrepreneurs tended to change the product offering and the crowdfunding process simultaneously and to a similar extent. Model 4 described in our Results section and the model including the *extent of crowdfunding-process-related change* as a dependent variable display similar patterns of results. Table 6 shows a significant negative effect of  $P < GAL^2$  ( $b = -2.74, p = 0.03$ ) and significant positive effects of  $P < GAL \times$  deadline proximity ( $b = 4.93, p = 0.03$ ) and  $P < GAL^2 \times$  deadline proximity ( $b = 4.52, p = 0.00$ ) on the subsequent *extent of crowdfunding-process-related change*. These results are consistent with the results for Hypotheses 1 and 2, as reported above.

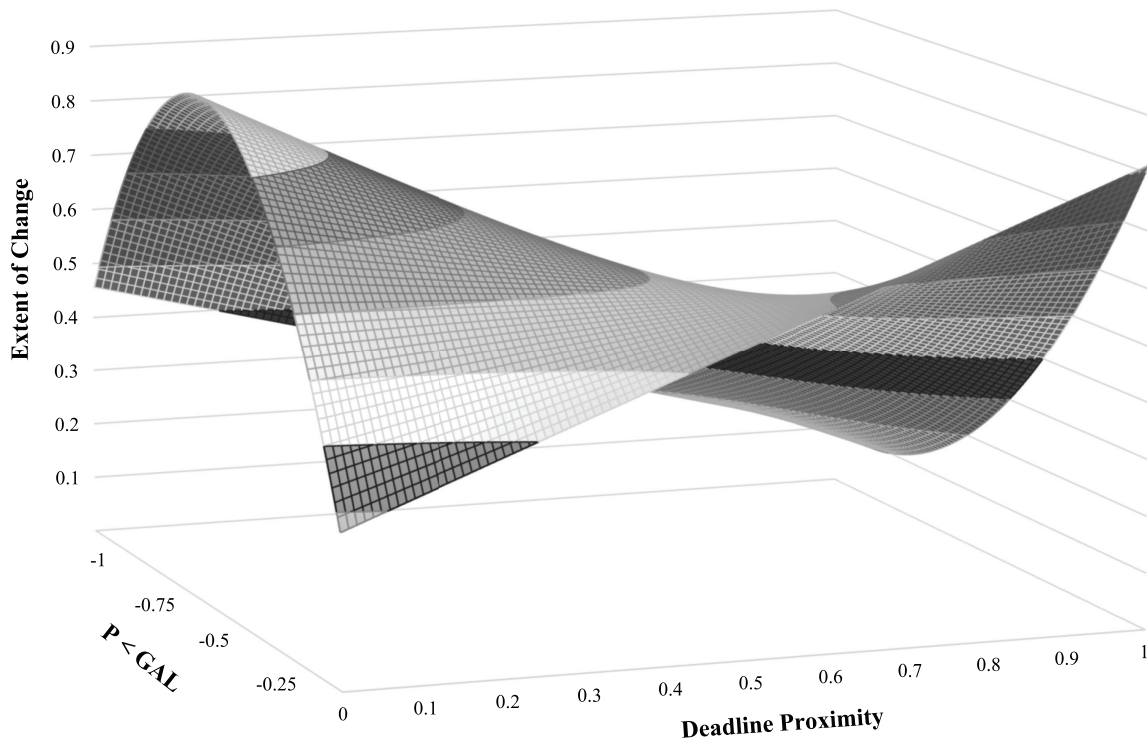
With respect to Hypotheses 3 and 4, we also found significant positive effects of  $P < SAL$  ( $b = 0.35, p = 0.09$ ) and  $P < SAL^2$  ( $b = 0.27, p = 0.01$ ) and a significant negative effect of  $P < SAL^2 \times$  deadline proximity ( $b = -0.30, p = 0.03$ ) on the subsequent *extent of crowdfunding-process-related change*. In contrast to the analyses reported in our

**Table 3.** Effects for  $P < GAL$  Under Low and High Deadline Proximity

		P < GAL										
		0	−0.1	−0.2	−0.3	−0.4	−0.5	−0.6	−0.7	−0.8	−0.9	−1
Low deadline proximity (mean −1 SD)	<i>b</i>	0.35	0.51	0.63	0.72	0.77	0.80	0.78	0.74	0.66	0.55	0.40
	<i>p</i>	0.42	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
High deadline proximity (mean + 1 SD)	<i>b</i>	0.67	0.61	0.56	0.51	0.46	0.41	0.36	0.32	0.27	0.23	0.19
	<i>p</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Difference test	$\chi^2$	0.66	0.12	0.09	1.41	5.07	10.72	16.53	21.89	28.49	38.97	24.50
	<i>p</i>	0.42	0.72	0.76	0.23	0.02	0.00	0.00	0.00	0.00	0.00	0.00

Note. Two-tailed tests.

**Figure 2.** Interplay of Fundraising Performance Below the Goal-Based Aspiration Level ( $P < GAL$ ) and *Deadline Proximity* on *Extent of Change*



Results section, however, we found no effect of  $P < SAL \times$  *deadline proximity* ( $b = -0.24, p = 0.38$ ). Overall, we argue that these additional analyses demonstrate the generalizability of our above results to other types of change action that an entrepreneur struggling to raise funds during crowdfunding campaigns might take.

## Discussion

This study offers theory and evidence addressing the theoretical tension in extant resource mobilization research about when and why entrepreneurs change, or do not change, their product offering during underperforming fundraising attempts. Because current resource mobilization research does not offer theory to resolve this tension, we follow Clough et al.’s (2019, p. 241) call to develop theory through consilience (Wilson 1998), resulting in resource mobilization theory that is “... consistent with broader theoretical conversations in strategy and organization theory.” Hence, we integrate established behavioral theory on change in response to underperformance

into the resource mobilization literature, present empirical evidence showing that entrepreneurs act in both ways, and identify boundary conditions of the respective notions. We extend the resource mobilization literature by developing behavioral theory that explains when and why entrepreneurs take an important action during the resource mobilization access stage, thereby complementing prior research that links resource mobilization actions and outcomes (Aldrich and Ruef 2018, Clough et al. 2019, Colombo 2021). Given the empirical setting of the present study, our work further contributes to crowdfunding research. Finally, we expand the Behavioral Theory of the Firm by introducing a temporal dimension to this theory and explicating how and why deadline proximity affects actors’ responses to aspiration-level discrepancies.

## Contributions to Entrepreneurial Resource Mobilization Research

The goal of entrepreneurial resource mobilization research is to “explain the initial stock of resources of a new organization” (Clough et al. 2019, p. 240). Prior research has made substantial progress toward this goal by explaining how entrepreneurs’ actions (e.g., Petkova et al. 2013, Cornelius and Gokpinar 2020) and attributes (e.g., Alsos et al. 2006) enable them to meet their fundraising goals in the access stage of resource mobilization. This research has also shown that because entrepreneurs face considerable uncertainty about resource holders’ preferences (Alvarez and Barney 2005, Townsend et al. 2018, Shepherd

**Table 4.** Effects for  $P < SAL$

	$P < SAL$							Min
	0	-0.5	-1	-1.5	-2	-2.5	-3	
$b$	0.46	0.38	0.34	0.36	0.43	0.54	0.71	0.87
$p$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01

Note. Two-tailed tests.

**Table 5.** Effects for  $P < SAL$  Under Low and High *Deadline Proximity*

		P < SAL							
		0	-0.5	-1	-1.5	-2	-2.5	-3	Min
Low deadline proximity (mean -1 SD)	<i>b</i>	0.66	0.52	0.47	0.51	0.65	0.87	1.18	1.49
	<i>p</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
High deadline proximity (mean + 1 SD)	<i>b</i>	0.26	0.23	0.22	0.21	0.21	0.21	0.23	0.25
	<i>p</i>	0.00	0.00	0.00	0.00	0.01	0.05	0.19	0.31
Difference test	$\chi^2$	45.89	14.76	7.70	9.57	11.39	9.13	7.18	6.27
	<i>p</i>	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01

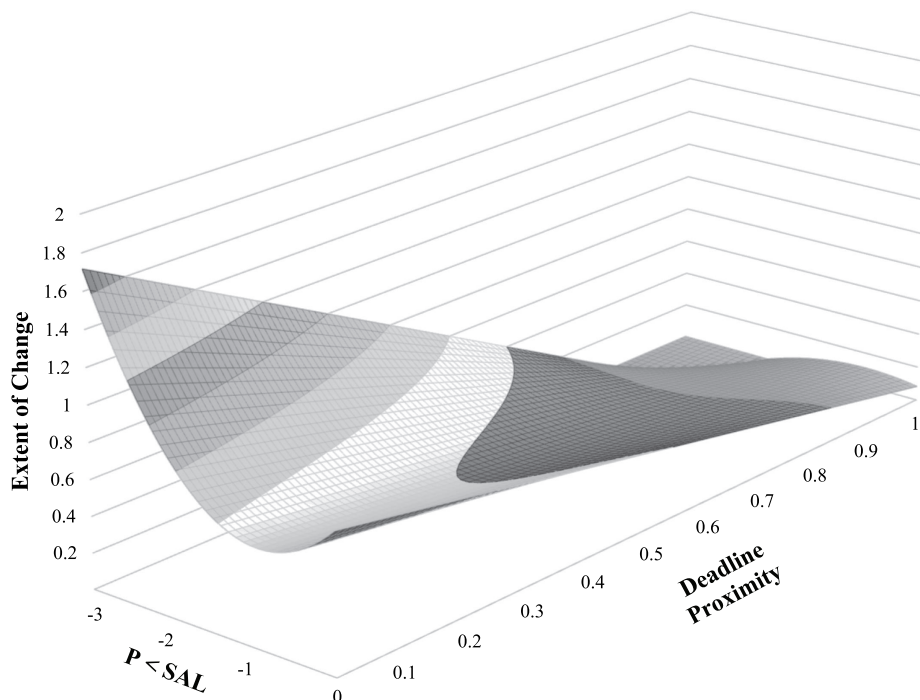
Note. Two-tailed tests.

and Gruber 2021), their product offerings are often inconsistent with resource holders' preferences and lead to underperforming fundraising attempts (Cornelius and Gokpinar 2020, Eisenmann 2021). We provided both illustrative qualitative and quantitative data demonstrating that entrepreneurs act very differently in this situation: some entrepreneurs change their product offering (more or less) extensively, while others do not change their product offering. Previous resource mobilization research has not been able to consistently explain this phenomenon; instead, the literature offers conflicting explanations, resulting in a theoretical tension. Against this background, our study offers two contributions to the literature on resource mobilization.

First, the behavioral theory we develop provides one path to resolve the theoretical tension we identified in the literature. Our consilience approach—integrating two established streams of behavioral research on change in response to underperformance in the face of uncertainty—

allows us to identify conditions inherent to fundraising attempts that make changing the product offering a more or less attractive option for entrepreneurs at different points in a fundraising attempt. The theorizing we develop based on this approach explains that despite the conflicting arguments on entrepreneurs' responses to fundraising struggles in the two research streams (e.g., Garud et al. 2014, Cornelius and Gokpinar 2020, Felin et al. 2020), both provide valid explanations, but only under distinct conditions. Our study thus qualifies extant theories on entrepreneurial change action during underperforming fundraising attempts by outlining boundary conditions under which they apply (Busse et al. 2017).

Our theorizing and evidence are consistent with arguments that entrepreneurs adapt their product offering so that it more-closely aligns with resource holders' preferences (e.g., Cornelius and Gokpinar 2020) and signals entrepreneurs' motivation and ability to handle challenging circumstances (e.g., Fisher et al. 2020) when fundraising

**Figure 3.** Interplay of Fundraising Performance Below the Social Aspiration Level ( $P < SAL$ ) and *Deadline Proximity* on *Extent of Change*



**Table 6.** Additional Analysis: Change in Crowdfunding Process

Independent variables	DV Extent of change in crowdfunding process		
	Coeff.	Robust SEs	<i>p</i>
Intercept	0.74	0.75	0.33
Time-dummies		Included	
Front Page	0.20	0.12	0.09
P < GAL	−2.05	1.73	0.24
P < GAL <sup>2</sup>	−2.74	1.24	0.03
P < SAL	0.35	0.21	0.09
P < SAL <sup>2</sup>	0.27	0.10	0.01
Deadline proximity	0.46	0.80	0.56
P < GAL × deadline proximity	4.93	2.19	0.03
P < GAL <sup>2</sup> × deadline proximity	4.52	1.52	0.00
P < SAL × deadline proximity	−0.24	0.28	0.38
P < SAL <sup>2</sup> × deadline proximity	−0.30	0.14	0.03
Observations		6,758	
Campaigns		576	

Notes. Two-tailed tests. Robust standard errors clustered at the campaign-level.

underperformance is moderate and there is ample time left to eliminate this shortfall. Under these conditions, entrepreneurs have both the incentive and the time to search for ways of adjusting their product offering to gauge resource holders' uncertain preferences (Berglund et al. 2020, Bocken and Snihur 2020) and to signal their competence, as suggested by the lean startup, agile entrepreneurship, and entrepreneurial hustle literatures (Ries 2011, Fisher et al. 2020, Shepherd and Gruber 2021). In our introductory vignette, entrepreneurs Jason and Nicole Stark were faced with a narrowing fundraising gap that had plateaued early in their campaign, apparently providing them with both sufficient incentives and time to change *Ninja Pizza Girl*.

In contrast, when there is little time left to remedy a considerable fundraising shortfall, our theorizing offers arguments that can explain when and why entrepreneurs double-down and refrain from changing the product offering: when the likelihood of swaying resource holders by changing the product offering is so low that it does not justify the risks and costs (Garud et al. 2014, Fisher and Kotha 2015, Bigelow et al. 2019, Grimes et al. 2019, Felin et al. 2020) associated with changing the product offering in the fundraising attempt. Evan Gruntz, the other entrepreneur in our introductory vignette, had a persistent, significant fundraising performance gap. With time running out, Evan Gruntz may have determined that making changes to *Project Tanuki* was an unattractive option and that the campaign was likely a lost cause. Our theorizing not only explains these apparently conflicting actions, thereby offering a path to resolve the theoretical tension that motivated our study, but—because it informs our understanding of entrepreneurs' actions under conditions of uncertainty during resource mobilization—may also help overcome an emerging theoretical disconnect. While resource mobilization research has largely focused on resource holders'

uncertainty (Clough et al. 2019, Colombo 2021), our theorizing is consistent with the larger entrepreneurship literature in problematizing entrepreneurs' uncertainty (Townsend et al. 2018, Berglund et al. 2020, Camuffo et al. 2020).

Second, this study advances research on the relevant actors in the access stage of entrepreneurial resource mobilization, specifically, how they affect change actions of entrepreneurs. This contribution follows from our consilience approach to resource mobilization theory development (Clough et al. 2019). Consilience seeks to establish consistency of knowledge across research domains (Wilson 1998). Our behavioral theorizing integrates arguments and evidence from the Behavioral Theory of the Firm (Cyert and March 1963, Greve 1998) and research on time pressure (Lehman et al. 2011, Kunisch et al. 2017, Stouten et al. 2018) to explain how entrepreneurs' close peers affect entrepreneurs' change action during resource mobilization. Our qualitative data supports this notion, as demonstrated by the illustrative quotes. Our study indicates a need to expand the scope of research on resource mobilization, as it shows that the set of actors pertinent to determining when and why entrepreneurs take action is more extensive than previously acknowledged. Previous studies have proposed that entrepreneurs concentrate on resource holders when engaging in resource mobilization (e.g., Cornelius and Gokpinar 2020, Murray et al. 2020, Mittermaier et al. 2022). This idea conflicts with common findings in entrepreneurship research, which demonstrate that entrepreneurs also monitor their competitive environment (Mueller et al. 2012). Our study proposes and demonstrates that resource holders are not the sole influencers of entrepreneurs' change actions during resource mobilization. Specifically, our results indicate that when fundraising performance falls substantially below the social

aspiration level and deadline proximity decreases, an increase in the extent of change follows. However, when performance merely falls slightly below the social aspiration level, no such effect occurs. We posit that this is because entrepreneurs do not face immediate penalties for failing to fully meet social aspirations. By incorporating close peers of entrepreneurs into research on the access stage of entrepreneurial resource mobilization and identifying boundary conditions for when they matter in explaining change action during resource mobilization, our behavioral theorizing may help to reconcile an emerging inconsistency between research on resource mobilization that largely overlooks peers and related research on pre- and post-resource-mobilization stages, such as research on business model design, market-entry choice, and venture growth, which emphasizes the importance of peers in explaining entrepreneurial behavior (e.g., Kacperczyk 2013, Martin-Sanchez et al. 2018, McDonald and Eisenhardt 2020).

We expect that our theorizing applies across different fundraising settings to explain when and why entrepreneurs change their product offering, and may even explain other actions entrepreneurs take in response to fundraising struggles. In general, our theoretical arguments on when entrepreneurs change their product offering during underperforming fundraising attempts are contingent on the existence of uncertainty vis-à-vis resource holder preferences, a fundraising goal, a corresponding deadline, and peers. Furthermore, we assume that the entrepreneur is able to change the product offering during the fundraising attempt. Many fundraising settings meet these criteria: Not only in crowdfunding (Mollick 2014, Murray et al. 2020) but also in other settings, such as venture capital (Franke et al. 2008) and business angel investment (Huang and Pearce 2015), entrepreneurs typically face uncertainty about resource holders' preferences and have a fundraising goal. Entrepreneurs also typically have a deadline by which to mobilize funds. These deadlines can be formal—for example, the end of an incubator or accelerator program (Kim and Kim 2022)—or informal—such as entrepreneurs' cash-burn rates (Cable and Shane 1997, Eisenmann 2021). In addition, entrepreneurs seeking venture capital or angel investments are often competing with other entrepreneurs, and in these settings, product-offering changes are common (Ebbers and Wijnberg 2012, Petkova et al. 2013). Hence, we argue that our theorizing which stresses the influence of aspiration-level discrepancies and time pressure might also explain entrepreneurs' actions related to the product offering and the fundraising process beyond the context of crowdfunding. In IPO settings, entrepreneurs face contingencies similar to those faced by the entrepreneurs in our study—a fundraising goal, deadlines, and peers seeking funds—but these settings do not necessarily allow entrepreneurs to substantially change their product

offering. However, entrepreneurs can and do take other actions relevant for their fundraising attempt, such as substantial last-minute dress-up (Pearlstein and Hamilton 2012). Thus, our theorizing might also be relevant to settings such as IPOs, where entrepreneurial actions differ from product-offering changes. While we thus believe that our theorizing might apply to many other fundraising settings, it is unlikely to apply to all settings. For example, when raising funds from family and friends (Kotha and George 2012), the adaptive mechanisms we postulate are likely ineffective. This is because entrepreneurs in this context are likely to receive overly favorable reactions on their product offering (Zellweger and Zenger 2023), thus undermining one core trigger of problemistic search and subsequent change. Although we expect that our theoretical arguments might have considerable explanatory potential in other resource mobilization settings, further research might be warranted that tests our theoretical arguments in these settings.

### Contributions to Research on Crowdfunding

This study enhances our understanding of entrepreneurial action during crowdfunding campaigns by offering a perspective rarely covered by prior research. Prior crowdfunding research has provided detailed insights into predictors of crowdfunding campaign success (e.g., Mollick 2014, Davis et al. 2017) and the consequences of campaign failure for subsequent campaigns (e.g., Williams et al. 2020, Piening et al. 2021). It has also sought to gain a deeper understanding of campaign success by linking how and why entrepreneurs engage with backers during crowdfunding to overcome resource mobilization shortfalls, showing that these interactions involve extensive information exchange. These studies have uncovered how entrepreneurs not only convey relevant information to potential backers during campaigns (e.g., Kuppuswamy and Bayus 2017, Sahaym et al. 2021), but also how they actively involve backers in order to affect campaign and postcampaign outcomes (e.g., Cornelius and Gokpınar 2020, Murray et al. 2020, Murray and Fisher 2023). This work has provided important initial insights into how and why entrepreneurs act during crowdfunding.

Our study expands this line of research by offering a parsimonious complement to prior work on entrepreneurial action during crowdfunding campaigns. While prior research has focused on how successful entrepreneurs engage in elaborate information exchange with backers during crowdfunding campaigns (Eiteneyer et al. 2019, Murray et al. 2020), we show that basic information—on aspiration attainment and deadline proximity—may explain *when* entrepreneurs take action; and importantly, *when they do not*. Our theorizing thus not only broadens existing models of entrepreneurial action during crowdfunding campaigns, it may also solve a puzzle. Even though various studies have found

that entrepreneurs benefit from changing their product offering during crowdfunding campaigns (e.g., Cornelius and Gokpinar 2020, Murray et al. 2020), and crowdfunding platforms encourage such conduct (e.g., Crane 2016), entrepreneurs do not consistently engage in this apparently beneficial action. Our study shows that fundraising performance below aspirations and decreasing time may jointly discourage entrepreneurs from taking action and thus provides one explanation for why we do not see more change action in some crowdfunding campaigns.

Our study also has methodological implications for crowdfunding research. A large body of crowdfunding research regresses crowdfunding success on the characteristics of a crowdfunding product offering as it was presented at the end of a crowdfunding campaign (e.g., Mollick 2014, Calic and Mosakowski 2016, Anglin et al. 2018). Our results indicate that those studies might have missed an important part of the story: The product offering at the time backers pledged their financial contribution may have been different from the product offering at the end of the campaign. In order to explain crowdfunding success as a consequence of the characteristics of the product offered, future studies should consider *when* during a crowdfunding campaign a pledge was made and for which particular product offering entrepreneurs were seeking funds.

### Contributions to the Behavioral Theory of the Firm

This study also extends the Behavioral Theory of the Firm (Cyert and March 1963, Gavetti et al. 2012) by showing how deadline proximity affects actors' responses to aspiration-attainment discrepancies. Acknowledging this temporal dimension is important because deadlines and their resulting time pressure are ubiquitous in organizational contexts and strongly constrain actors' options for addressing aspiration-attainment discrepancies—that is, to change. For example, firms regularly announce quarterly earnings goals, and if they are concerned that they might not meet these goals, managers need to decide whether and what they should change in order to achieve them. The time available until the next earnings report likely shapes their behavior. Projects and other forms of temporary organizing—for example, management consulting projects (Reihlen and Nikolova 2010) and construction projects (Lundin and Söderholm 1995)—also typically have limited timeframes and a deadline by which these organizations have to reach predefined goals (Bakker et al. 2016). The theorizing we offer explains how time constraints may affect actors' responses to performance below aspirations.

The theorizing we develop may also explain why some studies report inconsistent results based on what the Behavioral Theory of the Firm would predict. This theory posits that actors make more-extensive changes when they are further away from achieving their aspirations

(Greve 2003b). Empirical research widely supports this notion. However, some studies report insignificant and even inconsistent results (Posen et al. 2018, Kotiloglu et al. 2019). Scholars have sought to reconcile the mixed empirical evidence by accounting for boundary conditions, such as firm size (Greve 2008), slack resources (Chen 2008, Kuusela et al. 2017, Kavusan and Frankort 2019), and industry sector (Kotiloglu et al. 2019). However, the main theoretical explanation that scholars have offered for why actors change less, rather than more, with increasing performance-aspiration-level shortfalls is that at some point, actors shift their attention away from attaining aspiration levels to ensuring survival (March and Shapira 1992, Iyer and Miller 2008, Lehman et al. 2011, Ref and Shapira 2017). Audia and Greve (2006), in their study of shipbuilding firms, argue that managers of small firms interpret a shortfall in performance as a step closer to organizational failure. Because small firms have limited resources and are vulnerable to poor performance, small-firm managers avoid risky factory expansions when it is increasingly likely that they will not meet their aspiration. Similarly, Ref and Shapira (2017) argue that firms in danger of not surviving are more likely to reduce risk-taking and avoid risky new activities—in their case, entering new markets. These pertinent studies offer plausible, consistent arguments and valuable insights. However, to explain the proposed shift in actors' attention they use the very same indicator—performance below aspirations—as studies that find a positive association between the intensity of remedial action and performance below aspiration levels. To provide a more comprehensive explanation of when actors' attention shifts from attaining their aspiration to accepting the possibility of failure, it is necessary to identify what triggers this shift, independent of the level of performance below aspirations.

The present study offers such an explanation, suggesting that deadline proximity triggers these attentional shifts: when actors have little time to take action, their attention shifts from attaining their aspiration to taking preventive or more-drastic actions, such as trying to avoid imminent organizational failure or giving up on pursuing aspirations that are unlikely to be achieved. This effect manifests when actors perform substantially below their aspiration levels and have little time to turn the situation around, as their focus moves to minimizing the impact of failure instead of seeking to eliminate the performance shortfall. Threat-rigidity theorizing (Staw et al. 1981, March and Shapira 1992) provides a sound explanation for this reaction by arguing that managers in this situation are more likely to conserve resources (Bromiley and Washburn 2011) and avoid new, risky activities (Miller and Chen 2004). In contrast to prior research, our theorizing and empirical results suggest that performance shortfalls relative to aspirations may not be sufficient to trigger risk-avoiding responses. Rather, the time



actors have at their disposal to remedy performance-aspiration level discrepancies critically shapes actors' response.

While our empirical study pertains to a particular empirical context and change action, we expect that our theorizing on the importance of deadlines as a contingency in explaining actions intended to remedy performance-aspiration level discrepancies might also apply in other contexts and for other types of change when performance is subject to time pressure. For example, if a product's on-time delivery stalls due to quality problems, we expect there to be a similar curvilinear relationship between the severity of the quality issues and the proximity of the delivery date in predicting the extent of corrective action taken to address the quality issues by modifying input resources or production processes. Future research might scrutinize this expectation.

### Limitations and Future Research

Our study offers several opportunities for future research that could address some of its limitations. First, we tested our theory with data from a specific field, entrepreneurs' crowdfunding campaigns for video games. While crowdfunding is an exemplary setting to test our theory because both the fundraising goals and deadlines are specific and exogenous, it is also an extreme setting, because in other forms of financial resource mobilization, the aspirations and deadlines can be fuzzier or can change during fundraising attempts. For example, entrepreneurs can lower their goals during the process (Ries 2011, Eisenmann 2021). To scrutinize the empirical generalizability of our theorizing we therefore invite future research to replicate our study in settings where deadlines and goals are more malleable. Similarly, our single focus on the video-game industry suggests that replication of our theory in other industries would be helpful, as our operationalization of product change is specific to this industry. As our theorizing is largely agnostic to the specific setting of entrepreneurial resource mobilization, we expect it to hold beyond crowdfunding settings. We also invite future research to test whether our theorizing, suggesting that deadlines amplify a lost-cause effect, also holds for established firms that have different ways of "giving up" on a goal, such as changing their aspiration levels. Another limitation following from our choice of setting and research design is that our study—similar to most research using the Behavioral Theory of the Firm (Greve 2018)—uses theoretical arguments on the cognitive processes that link performance below aspirations and change. We encourage future research to provide a direct test of these cognitive mechanisms using, for example, fine-grained entrepreneur-level psychometric data.

Furthermore, due to the platform design of Kickstarter, the fundraising goals and deadlines we study are

exogenous to our model. How goals and deadlines in entrepreneurial resource mobilization are set is thus outside the scope of this study. However, these questions do point out important avenues for future research. With regard to goals, entrepreneurs—in contrast to established firms, which often use their own history to set their aspiration levels (Shinkle 2012, Bromiley and Harris 2014)—mostly seem to derive their aspirations from budgets or cost forecasts when raising funds (Casar 2014). Because we know little about how entrepreneurs form aspirations and what factors shape this process, we invite future research to tease out how fundraising goals come about. We also invite future research on entrepreneurs' choices of deadlines. Again, the deadline was exogenous to our study because entrepreneurs on Kickstarter need to set the campaign duration prior to the campaign start. Future research could study how entrepreneurs' characteristics—such as their traits (e.g., conscientiousness) and prior experiences (e.g., number of failed campaigns)—affect their subsequent choice of campaign length. Such cross-campaign effects have received limited attention by researchers so far (for recent exceptions, see Peterson and Wu 2021, Piening et al. 2021). We also would like to encourage research that deepens our understanding of whether and how entrepreneurs' action during fundraising attempts is influenced by entrepreneurs' characteristics, such as their education or training. In the present study, we used fixed-effects models that parcel out such entrepreneur-level, intertemporally stable effects.

Finally, we invite future research to study the consequences of failed fundraising attempts to better understand when entrepreneurs reattempt resource mobilization for a given product or pivot into different opportunities. Because our study focused on entrepreneurs' action *during* fundraising attempts, it provides limited insights into what happens *after* (failed) attempts. This question is interesting, because previous research has begun to outline how entrepreneurs learn across fundraising attempts (Peterson and Wu 2021), how they use failures to pivot (Hampel et al. 2020), and how they benefit from pivoting (Ries 2011, Contigiani and Levinthal 2019). New ventures pivot when they fundamentally change their strategy, identity, and overarching goals. Pivots thus involve fundamental, far-reaching changes to a venture's product, technology, target market, target customers, or business model, for example (McDonald and Gao 2019, Kirtley and O'Mahony 2023). Our study focuses on entrepreneurs' changes to a particular product offering during specific fundraising attempts, and thus does not cover pivots. However, pivots could occur as a consequence of fundraising failure across (rather than within) fundraising attempts, and we encourage research on the paths and pivots entrepreneurs take across multiple fundraising attempts.<sup>7</sup>

## Conclusion

We develop theory to reconcile conflicting predictions on the extent to which entrepreneurs who perform below their fundraising aspirations change their product offering during a fundraising attempt. We show that entrepreneurs' actions in response to fundraising shortfalls vary as a function of important yet understudied information inherent to fundraising attempts. Specifically, we theorize and find empirically that the extent to which entrepreneurs change their product offering varies as a function of the entrepreneurs' fundraising performance in relation to the fundraising goal and social reference points contingent on the time that remains to attract the needed financial resources. Overall, this study advances our understanding of entrepreneurial resource mobilization, has important implications for crowdfunding research, and extends the Behavioral Theory of the Firm.

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## Endnotes

<sup>1</sup> In line with previous research on resource mobilization (e.g., Clough et al. 2019, Souitaris et al. 2023), we use the term “fundraising” to refer to “financial resource mobilization.”

<sup>2</sup> We also draw on general entrepreneurship research because it covers entrepreneurial action research (e.g., Townsend et al. 2018), and thus provides theory to understand how entrepreneurs act under the uncertainty inherent to fundraising attempts, which the more-specific entrepreneurial resource mobilization research has rarely studied.

<sup>3</sup> Research on resource mobilization has developed across multiple scientific communities, resulting in distinct but conceptually overlapping terminology (Clough et al. 2019). In particular, the term “resource acquisition” is sometimes used synonymously with “resource mobilization” (e.g., Colombo 2021), yet in other works is also used as a distinct concept—e.g., “finding investors, employees, associates, or customers” (Zott and Huy 2007, p. 70). Following the seminal review by Clough et al. (2019) and recent studies on the subject (e.g., Murray et al. 2020, Mittermaier et al. 2022, Murray and Fisher 2023), we use the term “resource mobilization” and the corresponding definitions by Clough et al. (2019) to label the domain we study. While the term subsumes the assembling of various types of resources, such as financial, social, and human resources, the focus of our study is on the mobilization of financial resources—that is, fundraising—because financial resources typically provide the basis

to assemble other resources, such as hiring employees or purchasing equipment (Zahra 2021).

<sup>4</sup> To gain firsthand knowledge of our empirical setting and to inform our ongoing theorizing, we conducted 16 interviews with entrepreneurs running Kickstarter campaigns in the video-game industry (the empirical setting of our study). We recruited three interviewees using information from our quantitative sample and an additional 13 interviewees at Gamescom 2017, one of the largest annual gaming expos, in Cologne, Germany. We used an interview guideline that focused on the entrepreneurs' campaign experiences. Interviews were conducted in English and German, via Skype or telephone, and lasted between 15 and 60 minutes. All interviews were transcribed, coded, and thematically analyzed (Miles et al. 2013).

<sup>5</sup> In our interviews, for example, we learned how entrepreneurs identified similar peers to compare their fundraising performance during fundraising attempts: “[I] mostly [looked at] campaigns that were similar to the game I was working on ... We were looking for campaigns that were similar ... like other RPG games [role-playing games; i.e., the genre]. ... For example ... campaigns that were asking for a similar amount of money.” These qualitative data provided additional evidence supporting our selection of dimensions relevant for peer comparison.

<sup>6</sup> We follow earlier research (e.g., Chang et al. 2019, Luo et al. 2021) and methodological guidance (Angrist and Pischke 2009) by using fixed-effects OLS regression to estimate a model with an ordered dependent variable. To demonstrate the robustness of our results, we ran additional analyses using the user-written program *feologit* (Baetschmann et al. 2020) that fits a fixed-effects ordered logit model. While fixed-effects ordered logit estimators cannot carry out the marginal-effects analyses (Baetschmann et al. 2020) that we depend on to test our hypotheses, the results obtained by using *feologit* were consistent with the Model 4 results reported in Table 2. These results (available from the authors) demonstrate the robustness of our analyses.

<sup>7</sup> Additional data we collected on entrepreneurs suggest that across-campaign pivots are rare in our sample. A large majority of the entrepreneurs who failed engaged in no subsequent Kickstarter campaign (79.14%). Only 11.11% of failed entrepreneurs switched to different product categories in subsequent Kickstarter campaigns. This evidence is consistent with Kirtley and O'Mahony's (2023) observation that pivots are rare.

## References

- Aguinis H, Edwards JR (2014) Methodological wishes for the next decade and how to make wishes come true. *J. Management Stud.* 51(1):143–174.
- Aiken LS, West SG (1991) *Multiple Regression: Testing And Interpreting Interactions* (Sage, Newbury Park, CA).
- Aldrich HE, Ruef M (2018) Unicorns, gazelles, and other distractions on the way to understanding real entrepreneurship in the United States. *Acad. Management Perspect.* 32(4):458–472.
- Allen J, Stevenson R, Wang T (2021) Creative and resourceful: How human, social, and psychological resources affect creative workers' ability to rebound after failure. *Small Bus. Econom.* 57(2):705–719.
- Alsos GA, Isaksen EJ, Ljunggren E (2006) New venture financing and subsequent business growth in men- and women-led businesses. *Entrep. Theory Pract.* 30(5):667–686.
- Alvarez SA, Barney JB (2005) How do entrepreneurs organize firms under conditions of uncertainty? *J. Management* 31(5):776–793.
- Anglin AH, Wolfe MT, Short JC, McKenny AF, Pidduck RJ (2018) Narcissistic rhetoric and crowdfunding performance: A social role theory perspective. *J. Bus. Venturing* 33(6):780–812.

- Angrist JD, Pischke J-S (2009) *Mostly Harmless Econometrics: An Empiricist's Companion* (Princeton University Press, Princeton, NJ).
- Argote L, Greve HR (2007) A behavioral theory of the firm—40 years and counting: Introduction and impact. *Organ. Sci.* 18(3):337–349.
- Audia PG, Greve HR (2006) Less likely to fail: Low performance, firm size, and factory expansion in the shipbuilding industry. *Management Sci.* 52(1):83–94.
- Baetschmann G, Ballantyne A, Staub KE, Winkelmann R (2020) Feolgit: A new command for fitting fixed-effects ordered logit models. *Stata J.* 20(2):253–275.
- Bakker RM, DeFillippi RJ, Schwab A, Sydow J (2016) Temporary organizing: Promises, processes, problems. *Organ. Stud.* 37(12):1703–1719.
- Balogun J, Bartunek JM, Do B (2015) Senior managers' sensemaking and responses to strategic change. *Organ. Sci.* 26(4):960–979.
- Berglund H, Bousfiha M, Mansoori Y (2020) Opportunities as artifacts and entrepreneurship as design. *Acad. Management Rev.* 45(4):825–846.
- Bigelow L, Nickerson JA, Park W-Y (2019) When and how to shift gears: Dynamic trade-offs among adjustment, opportunity, and transaction costs in response to an innovation shock. *Strategic Management J.* 40(3):377–407.
- Bitektine A, Hill K, Song F, Vandenberghe C (2020) Organizational legitimacy, reputation and status: Insights from micro-level measurement. *Acad. Management Discov.* 6(1):107–136.
- Bocken N, Snihur Y (2020) Lean startup and the business model: Experimenting for novelty and impact. *Long Range Plann.* 53(4):101953.
- Bromiley P, Harris JD (2014) A comparison of alternative measures of organizational aspirations. *Strategic Management J.* 35(3):338–357.
- Bromiley P, Washburn M (2011) Cost reduction vs innovative search in R&D. *J. Strategy Management* 4(3):196–214.
- Busse C, Kach AP, Wagner SM (2017) Boundary conditions: What they are, how to explore them, why we need them, and when to consider them. *Organ. Res. Methods* 20(4):574–609.
- Cable DM, Shane S (1997) A prisoner's dilemma approach to entrepreneur-venture capitalist relationships. *Acad. Management Rev.* 22(1):142–176.
- Calic G, Mosakowski E (2016) Kicking off social entrepreneurship: How a sustainability orientation influences crowdfunding success. *J. Management Stud.* 53(5):738–767.
- Camuffo A, Cordova A, Gambardella A, Spina C (2020) A scientific approach to entrepreneurial decision making: Evidence from a randomized control trial. *Management Sci.* 66(2):564–586.
- Carpentier C, Suret J-M (2015) Angel group members' decision process and rejection criteria: A longitudinal analysis. *J. Bus. Venturing* 30(6):808–821.
- Cassar G (2014) Industry and startup experience on entrepreneur forecast performance in new firms. *J. Bus. Venturing* 29(1):137–151.
- Chang EH, Milkman KL, Chugh D, Akinola M (2019) Diversity thresholds: How social norms, visibility, and scrutiny relate to group composition. *Acad. Management J.* 62(1):144–171.
- Chemla G, Tinn K (2020) Learning through crowdfunding. *Management Sci.* 66(5):1783–1801.
- Chen G, Hambrick DC, Pollock TG (2008) Puttin' on the Ritz: Pre-IPO enlistment of prestigious affiliates as deadline-induced remediation. *Acad. Management J.* 51(5):954–975.
- Chen W-R (2008) Determinants of firms' backward- and forward-looking R&D search behavior. *Organ. Sci.* 19(4):609–622.
- Chen X-P, Yao X, Kotha S (2009) Entrepreneur passion and preparedness in business plan presentations: A persuasion analysis of venture capitalists' funding decisions. *Acad. Management J.* 52(1):199–214.
- Clough DR, Fang TP, Vissa B, Wu A (2019) Turning lead into gold: How do entrepreneurs mobilize resources to exploit opportunities? *Acad. Management Ann.* 13(1):240–271.
- Colombo O (2021) The use of signals in new-venture financing: A review and research agenda. *J. Management* 47(1):237–259.
- Contigiani A, Levinthal DA (2019) Situating the construct of lean start-up: Adjacent conversations and possible future directions. *Indust. Corporate Change* 28(3):551–564.
- Cooper RG (1988) Predevelopment activities determine new product success. *Indust. Marketing Management* 17(3):237–247.
- Cornelius PB, Gokpinar B (2020) The role of customer investor involvement in crowdfunding success. *Management Sci.* 66(1):452–472.
- Courtney C, Dutta S, Li Y (2017) Resolving information asymmetry: Signaling, endorsement, and crowdfunding success. *Entrep. Theory Pract.* 41(2):265–290.
- Crane L (2016) Tips for running a great Kickstarter, from Kickstarter. Accessed February 15, 2022, <https://www.gamesindustry.biz/articles/2016-01-27-tips-for-running-a-great-kickstarter-from-kickstarter?ref=blog>.
- Cyert RM, March JG (1963) *A Behavioral Theory of the Firm* (Prentice-Hall, Englewood Cliffs, NJ).
- Davis BC, Hmieleski KM, Webb JW, Coombs JE (2017) Funders' positive affective reactions to entrepreneurs' crowdfunding pitches: The influence of perceived product creativity and entrepreneurial passion. *J. Bus. Venturing* 32(1):90–106.
- Ebbers JJ, Wijnberg NM (2012) Nascent ventures competing for start-up capital: Matching reputations and investors. *J. Bus. Venturing* 27(3):372–384.
- Eggers JP, Kaul A (2018) Motivation and ability? A behavioral perspective on the pursuit of radical invention in multi-technology incumbents. *Acad. Management J.* 61(1):67–93.
- Eggers JP, Suh J-H (2019) Experience and behavior: How negative feedback in new vs. experienced domains affects firm action and subsequent performance. *Acad. Management J.* 62(2):309–334.
- Eisenmann TR (2021) *Why Startups Fail: A New Roadmap for Entrepreneurial Success* (Currency, New York).
- Eiteneuer N, Bendig D, Brettel M (2019) Social capital and the digital crowd: Involving backers to promote new product innovativeness. *Res. Policy* 48(8):103744.
- Felin T, Gambardella A, Stern S, Zenger T (2020) Lean startup and the business model: Experimentation revisited. *Long Range Plann.* 53(4):101889.
- Fisher G, Neubert E (2023) Evaluating ventures fast and slow: Sensemaking, intuition, and deliberation in entrepreneurial resource provision decisions. *Entrep. Theory Pract.* 47(4):1298–1326.
- Fisher G, Stevenson R, Neubert E, Burnell D, Kuratko DF (2020) Entrepreneurial hustle: Navigating uncertainty and enrolling venture stakeholders through urgent and unorthodox action. *J. Management Stud.* 57(5):1002–1036.
- Fisher GG, Kotha S (2015) Entrepreneurial identity and resource acquisition: The role of venture identification. Shalley CE, Hitt MA, Zhou J, eds. *The Oxford Handbook of Creativity, Innovation, and Entrepreneurship* (Oxford University Press, Oxford, UK), 489–504.
- Franke N, Gruber M, Harhoff D, Henkel J (2008) Venture capitalists' evaluations of start-up teams: Trade-offs, knock-out criteria, and the impact of VC experience. *Entrep. Theory Pract.* 32(3):459–483.
- GameDesign (2018) The ultimate guide to character design. Accessed June 26, 2019, <https://www.gamedesigning.org/learn/character-design/>.
- Gameindustry.biz (2011) Indie project budgets. Accessed August 28, 2023, <http://www.gamesindustry.biz/articles/2011-04-27-indie-project-budgets-article>.
- Garud R, Schildt HA, Lant TK (2014) Entrepreneurial storytelling, future expectations, and the paradox of legitimacy. *Organ. Sci.* 25(5):1479–1492.
- Gavetti G, Greve HR, Levinthal DA, Ocasio W (2012) The behavioral theory of the firm: Assessment and prospects. *Acad. Management Ann.* 6(1):1–40.
- Gimmon E, Levie J (2021) Early indicators of very long-term venture performance: A 20-year panel study. *Acad. Management Discov.* 7(2):203–224.



- Greve HR (1998) Performance, aspirations, and risky organizational change. *Admin. Sci. Quart.* 43(1):58–86.
- Greve HR (2003a) A behavioral theory of R&D expenditures and innovations: Evidence from shipbuilding. *Acad. Management J.* 46(6):685–702.
- Greve HR (2003b) *Organizational Learning From Performance Feedback: A Behavioral Perspective on Innovation and Change* (Cambridge University Press, Cambridge, UK).
- Greve HR (2008) A behavioral theory of firm growth: Sequential attention to size and performance goals. *Acad. Management J.* 51(3):476–494.
- Greve HR (2011) Positional rigidity: Low performance and resource acquisition in large and small firms. *Strategic Management J.* 32(1):103–114.
- Greve HR (2018) Where to search? Augier M, Fang C, Rindova VP, eds. *Behavioral Strategy in Perspective* (Emerald, Bingley, UK), 91–100.
- Grimes MG, Williams TA, Zhao EY (2019) Anchors aweigh: The sources, variety, and challenges of mission drift. *Acad. Management Rev.* 44(4):819–845.
- Hampel CE, Tracey P, Weber K (2020) The art of the pivot: How new ventures manage identification relationships with stakeholders as they change direction. *Acad. Management J.* 63(2):440–471.
- Harrison JS, Bosse DA, Phillips RA (2010) Managing for stakeholders, stakeholder utility functions, and competitive advantage. *Strategic Management J.* 31(1):58–74.
- Honorof M (2013) How video game costs could crash the industry. Accessed August 28, 2023, [https://www.nbcnews.com/id/51339252/ns/technology\\_and\\_science-tech\\_and\\_gadgets/t/how-video-game-costs-could-crash-industry/#.VHxrV8nfCW8](https://www.nbcnews.com/id/51339252/ns/technology_and_science-tech_and_gadgets/t/how-video-game-costs-could-crash-industry/#.VHxrV8nfCW8).
- Huang L (2018) The role of investor gut feel in managing complexity and extreme risk. *Acad. Management J.* 61(5):1821–1847.
- Huang L, Pearce JL (2015) Managing the unknowable: The effectiveness of early-stage investor gut feel in entrepreneurial investment decisions. *Admin. Sci. Quart.* 60(4):634–670.
- Iyer DN, Miller KD (2008) Performance feedback, slack, and the timing of acquisitions. *Acad. Management J.* 51(4):808–822.
- Jaccard J, Turrisi R (2003) *Interaction Effects in Multiple Regression* (Sage, Thousand Oaks, CA).
- Joseph J, Gaba V (2015) The fog of feedback: Ambiguity and firm responses to multiple aspiration levels. *Strategic Management J.* 36(13):1960–1978.
- Kacperczyk AJ (2013) Social influence and entrepreneurship: The effect of university peers on entrepreneurial entry. *Organ. Sci.* 24(3):664–683.
- Kavusan K, Frankort HTW (2019) A behavioral theory of alliance portfolio reconfiguration: Evidence from pharmaceutical biotechnology. *Strategic Management J.* 40(10):1668–1702.
- Kerr WR, Nanda R, Rhodes-Kropf M (2014) Entrepreneurship as experimentation. *J. Econom. Perspect.* 28(3):25–48.
- Kim J-Y, Finkelstein S, Halebian J (2015) All aspirations are not created equal: The differential effects of historical and social aspirations on acquisition behavior. *Acad. Management J.* 58(5):1361–1388.
- Kim S, Kim A (2022) Going viral or growing like an oak tree? Toward sustainable local development through entrepreneurship. *Acad. Management J.* 65(5):1709–1746.
- Kirtley J, O'Mahony S (2023) What is a pivot? Explaining when and how entrepreneurial firms decide to make strategic change and pivot. *Strategic Management J.* 44(1):197–230.
- Ko E-J, McKelvie A (2018) Signaling for more money: The roles of founders' human capital and investor prominence in resource acquisition across different stages of firm development. *J. Bus. Venturing* 33(4):438–454.
- Kollmann T, Strauß C, Pröpper A, Faasen C, Hirschfeld A, Gilde J, Walk V (2022) *Deutscher Startup Monitor 2022* (Bundesverband Deutsche Startups e.V., Berlin).
- Kostopoulos K, Syrigos E, Kuusela P (2023) Responding to inconsistent performance feedback on multiple goals: The contingency role of decision maker's status in introducing changes. *Long Range Plann.* 56(1):1–15.
- Kotha R, George G (2012) Friends, family, or fools: Entrepreneur experience and its implications for equity distribution and resource mobilization. *J. Bus. Venturing* 27(5):525–543.
- Kotiloglu S, Chen Y, Lechler T (2019) Organizational responses to performance feedback: A meta-analytic review. *Strategic Organ.* 19(2):285–311.
- Kunisch S, Bartunek JM, Mueller J, Huy QN (2017) Time in strategic change research. *Acad. Management Ann.* 11(2):1005–1064.
- Kuppuswamy V, Bayus BL (2017) Does my contribution to your crowdfunding project matter? *J. Bus. Venturing* 32(1):72–89.
- Kuusela P, Keil T, Maula M (2017) Driven by aspirations, but in what direction? Performance shortfalls, slack resources, and resource-consuming vs. Resource-freeing organizational change. *Strategic Management J.* 38(5):1101–1120.
- Labianca G, Fairbank JF, Andrevski G, Parzen M (2009) Striving toward the future: Aspiration—Performance discrepancies and planned organizational change. *Strategic Organ.* 7(4):433–466.
- Lehman DW, Hahn J, Ramanujam R, Alge BJ (2011) The dynamics of the performance–risk relationship within a performance period: The moderating role of deadline proximity. *Organ. Sci.* 22(6):1613–1630.
- Leung MD, Sharkey AJ (2014) Out of sight, out of mind? Evidence of perceptual factors in the multiple-category discount. *Organ. Sci.* 25(1):171–184.
- Lévesque M, Stephan U (2020) It's time we talk about time in entrepreneurship. *Entrep. Theory Pract.* 44(2):163–184.
- Lind JT, Mehlum H (2010) With or without u? The appropriate test for a u shaped relationship. *Oxf. Bull. Econom. Stat.* 72(1): 109–118.
- Lounsbury M, Beckman CM (2015) Celebrating organization theory. *J. Management Stud.* 52(2):288–308.
- Lundin RA, Söderholm A (1995) A theory of the temporary organization. *Scand. J. Management* 11(4):437–455.
- Luo J, Chen J, Chen D (2021) Coming back and giving back: Transposition, institutional actors, and the paradox of peripheral influence. *Admin. Sci. Quart.* 66(1):133–176.
- Manning S, Bejarano TA (2017) Convincing the crowd: Entrepreneurial storytelling in crowdfunding campaigns. *Strategic Organ.* 15(2):194–219.
- March JG, Shapira Z (1992) Variable risk preferences and the focus of attention. *Psychol. Rev.* 99(1):172–183.
- Martin-Sanchez V, Contín-Pilart I, Larraza-Kintana M (2018) The influence of entrepreneurs' social referents on start-up size. *Internat. Entrep. Management J.* 14(1):173–194.
- McDonald R, Gao C (2019) Pivoting isn't enough? Managing strategic reorientation in new ventures. *Organ. Sci.* 30(6):1289–1318.
- McDonald RM, Eisenhardt KM (2020) Parallel play: Startups, nascent markets, and effective business-model design. *Admin. Sci. Quart.* 65(2):483–523.
- Mezias SJ, Chen Y-R, Murphy PR (2002) Aspiration-level adaptation in an American financial services organization: A field study. *Management Sci.* 48(10):1285–1300.
- Miles MB, Huberman AM, Saldaña J (2013) *Qualitative Data Analysis: A Methods Sourcebook* (Sage, Los Angeles).
- Miller KD, Chen W-R (2004) Variable organizational risk preferences: Tests of the March-Shapira model. *Acad. Management J.* 47(1):105–115.
- Mittermaier A, Shepherd DA, Patzelt H (2022) We cannot direct the wind, but we can adjust the sails: Prosocial ventures' responses to potential resource threats. *Organ. Sci.* 33(3):873–1249.
- Moliterno TP, Beck N, Beckman CM, Meyer M (2014) Knowing your place: Social performance feedback in good times and bad times. *Organ. Sci.* 25(6):1684–1702.

- Mollick E (2014) The dynamics of crowdfunding: An exploratory study. *J. Bus. Venturing* 29(1):1–16.
- Mueller S, Volery T, von Siemens B (2012) What do entrepreneurs actually do? An observational study of entrepreneurs' everyday behavior in the start-up and growth stages. *Entrep. Theory Pract.* 36(5):995–1017.
- Murray A, Fisher G (2023) When more is less: Explaining the curse of too much capital for early-stage ventures. *Organ. Sci.* 34(1):246–282.
- Murray A, Kotha S, Fisher G (2020) Community-based resource mobilization: How entrepreneurs acquire resources from distributed non-professionals via crowdfunding. *Organ. Sci.* 31(4):960–989.
- Ocasio W (1995) The enactment of economic adversity: A reconciliation of theories of failure-induced change and threat-rigidity. Staw BM, Cummings LL, eds. *Research in Organizational Behavior* (JAI Press, Greenwich, CT), 287–331.
- Ocasio W (1997) Toward an attention-based view of the firm. *Strategic Management J.* 18(6):187–206.
- Osiyevskyy O, Dewald J (2018) The pressure cooker: When crisis stimulates explorative business model change intentions. *Long Range Plann.* 51(4):540–560.
- Pacheco-de-Almeida G, Zemsky P (2007) The timing of resource development and sustainable competitive advantage. *Management Sci.* 53(4):651–666.
- Pearlstein JS, Hamilton RD (2012) Signaling, resource-based power, and pre-IPO organizational change. *New England J. Entrep.* 15(1):29–42.
- Peterson A, Wu A (2021) Entrepreneurial learning and strategic foresight. *Strategic Management J.* 42(13):2357–2388.
- Petkova AP, Rindova VP, Gupta AK (2013) No news is bad news: Sensegiving activities, media attention, and venture capital funding of new technology organizations. *Organ. Sci.* 24(3):865–888.
- Petty JS, Gruber M (2011) "In pursuit of the real deal": A longitudinal study of VC decision making. *J. Bus. Venturing* 26(2):172–188.
- Piderit SK (2000) Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *Acad. Management Rev.* 25(4):783–794.
- Piening EP, Thies F, Wessel M, Benlian A (2021) Searching for success—Entrepreneurs' responses to crowdfunding failure. *Entrep. Theory Pract.* 45(3):626–657.
- Posen HE, Chen JS (2013) An advantage of newness: Vicarious learning despite limited absorptive capacity. *Organ. Sci.* 24(6):1701–1716.
- Posen HE, Keil T, Kim S, Meissner FD (2018) Renewing research on problemistic search—A review and research agenda. *Acad. Management Ann.* 12(1):208–251.
- Priem RL (2007) A consumer perspective on value creation. *Acad. Management Rev.* 32(1):219–235.
- Ref O, Shapira Z (2017) Entering new markets: The effect of performance feedback near aspiration and well below and above it. *Strategic Management J.* 38(7):1416–1434.
- Reihlen M, Nikolova N (2010) Knowledge production in consulting teams. *Scand. J. Management* 26(3):279–289.
- Ries E (2011) *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses* (Currency, New York).
- Sahaym A, Datta A, Brooks S (2021) Crowdfunding success through social media: Going beyond entrepreneurial orientation in the context of small and medium-sized enterprises. *J. Bus. Res.* 125:483–494.
- Schaffer ME, Stillman S (2010) Xtoverid: Stata module to calculate tests of overidentifying restrictions after xtreg, xtivreg, xtivreg2 and xhtaylor. <https://ideas.repec.org/c/boc/bocode/s456779.html>.
- Schneider SL (1992) Framing and conflict: Aspiration level contingency, the status quo, and current theories of risky choice. *J. Exp. Psych. Learn. Mem. Cogn.* 18(5):1040–1057.
- Shane S (2003) *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus* (Edward Elgar Publishing, Cheltenham, UK).
- Shane S, Venkataraman S (2000) The promise of entrepreneurship as a field of research. *Acad. Management Rev.* 25(1):217–226.
- Shepherd DA, Gruber M (2021) The lean startup framework: Closing the academic-practitioner divide. *Entrep. Theory Pract.* 45(5):967–998.
- Shimizu K (2007) Prospect theory, behavioral theory, and the threat-rigidity-thesis: Combinative effects on organizational decisions to divest formerly acquired units. *Acad. Management J.* 50(6):1495–1514.
- Shinkle GA (2012) Organizational aspirations, reference points, and goals: Building on the past and aiming for the future. *J. Management* 38(1):415–455.
- Short JC, Palmer TB (2003) Organizational performance referents: An empirical examination of their content and influences. *Organ. Behav. Human Decision Processes* 90(2):209–224.
- Smith AN (2015) The backer-developer connection: Exploring crowdfunding's influence on video game production. *New Media Soc.* 17(2):198–214.
- Soublière J-F, Gehman J (2020) The legitimacy threshold revisited: How prior successes and failures spill over to other endeavors on Kickstarter. *Acad. Management J.* 63(2):472–502.
- Souitaris V, Peng B, Zerbinati S, Shepherd DA (2023) Specialists, generalists, or both? Founders' multidimensional breadth of experience and entrepreneurial ventures' fundraising at IPO. *Organ. Sci.* 34(2):557–588.
- Statista.com (2021) Main reasons for business failure among start-ups worldwide in 2021. Accessed February 14, 2023, <https://www.statista.com/statistics/1271464/start-up-failure-reasons/>.
- Statista.com (2023) Number of successfully funded projects on Kickstarter.Com as of February 2023, by project category. Accessed April 27, 2023, <https://www.statista.com/statistics/222460/number-of-successfully-pledged-kickstarter-projects-by-category/>.
- Staw BM, Sandelands LE, Dutton JE (1981) Threat rigidity effects in organizational behavior: A multilevel analysis. *Admin. Sci. Quart.* 26(4):501–524.
- Steigenberger N, Wilhelm H (2018) Extending signaling theory to rhetorical signals: Evidence from crowdfunding. *Organ. Sci.* 29(3):529–546.
- Stensaker I, Falkenberg J (2007) Making sense of different responses to corporate change. *Human Relations* 60(1):137–177.
- Stevenson HH (1989) A perspective on entrepreneurship. Stevenson HH, Roberts M, Grousbeck HI, eds. *New Business Ventures and the Entrepreneur* (Irwin, Boston), 4–19.
- Stouten J, Rousseau DM, Cremer Dd (2018) Successful organizational change: Integrating the management practice and scholarly literatures. *Acad. Management Ann.* 12(2):752–788.
- Tauscher K, Bouncken R, Pesch R (2021) Gaining legitimacy by being different: Optimal distinctiveness in crowdfunding platforms. *Acad. Management J.* 64(1):149–179.
- Townsend DM, Hunt RA, McMullen JS, Sarasvathy SD (2018) Uncertainty, knowledge problems, and entrepreneurial action. *Acad. Management Ann.* 12(2):659–687.
- Tversky A, Kahneman D (1979) Prospect theory: An analysis of decision under risk. *Econometrica* 47(2):263–292.
- Tyler BB, Caner T (2016) New product introductions below aspirations, slack and R&D alliances: A behavioral perspective. *Strategic Management J.* 37(5):896–910.
- Washburn M, Bromiley P (2012) Comparing aspiration models: The role of selective attention. *J. Management Stud.* 49(5):896–917.
- Weber S (2010) Bacon: An effective way to detect outliers in multivariate data using Stata (and mata). *Stata J.* 10(3):331–338.
- Wessel M, Thies F, Benlian A (2022) The role of prototype fidelity in technology crowdfunding. *J. Bus. Venturing* 37(4):1–24.

- Williams TA, Thorgren S, Lindh I (2020) Rising from failure, staying down, or more of the same? An inductive study of entrepreneurial reentry. *Acad. Management Discov.* 6(4):631–662.
- Wilson EO (1998) *Consilience: The Unity of Knowledge* (Knopf, New York).
- Wooldridge JM (2002) *Econometric Analysis of Cross Section and Panel Data* (MIT Press, Boston).
- Wooldridge JM (2012) *Introductory Econometrics*, 5th ed. (Cengage Learning, Mason, OH).
- Xu Y, Ni J (2022) Entrepreneurial learning and disincentives in crowdfunding markets. *Management Sci.* 68(9):6819–6864.
- Zahra SA (2021) The resource-based view, resourcefulness, and resource management in startup firms: A proposed research agenda. *J. Management* 47(7):1841–1860.
- Zellweger T, Zenger T (2023) Entrepreneurs as scientists: A pragmatist approach to producing value out of uncertainty. *Acad. Management Rev.* 48(3):379–408.
- Zott C, Huy QN (2007) How entrepreneurs use symbolic management to acquire resources. *Admin. Sci. Quart.* 52(1):70–105.

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