



## SUSTAINING ACTOR ENGAGEMENT DURING THE OPPORTUNITY DEVELOPMENT PROCESS

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**Research summary:** Recent entrepreneurship research has examined how opportunities are developed, highlighting the engagement of external actors. However, we know little about how entrepreneurs should interact with external actors to sustain their engagement. Since opportunity development is a process that unfolds over time, sustaining actor engagement is critical because it enables continued feedback and access to actors' resources. We present a process model that explains how entrepreneurs can sustain external actor engagement through two iterative phases: translation and transformation. We also propose that entrepreneurs can sustain actor engagement by structuring the timing of interactions and by modifying actors' perceptions of the time available for novel opportunity development. We conclude with an agenda for future research on actor engagement and entrepreneurs' temporal capabilities.

**Managerial summary:** To develop business opportunities, entrepreneurs require support, feedback, and other resources from different groups of individuals (actors), such as customers, business partners, investors, and regulators. We explain how entrepreneurs should continue to interact with these actors throughout the development period to secure sustained access to resources. Entrepreneurs need to present the business opportunity to actors in an engaging way, and subsequently integrate the feedback received during development of the project. Sustaining engagement from actors involves an iterative process through which the business opportunity is communicated and transformed. Entrepreneurs can influence actors' engagement by choosing how and when to interact with them. We highlight time and actor feedback as important resources that can be used by skillful entrepreneurs to increase the odds of opportunity development success. Copyright © 2016 Strategic Management Society.

## INTRODUCTION

In recent years, there has been growing interest in better understanding the process through which entrepreneurs develop opportunities (Dimov, 2007; Venkataraman *et al.*, 2012; Wright and Marlow, 2012), that is, actionable ideas for value creation.

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The opportunity development process, understood as the nexus of opportunities and individuals (Shane and Venkataraman, 2000), lies at the heart of entrepreneurship research. Scholars have begun to study the process from different perspectives, looking at the engagement of actors other than the entrepreneur (customers, business partners, investors, or regulators). They have highlighted the importance of external actors in providing entrepreneurs with resources, including money, expertise, network connections, and legitimacy (Dimov, 2007, 2011; Hallen and Eisenhardt, 2012).

Specifically, studies examining opportunity development as instituted in market structures (e.g., Aldrich and Fiol, 1994; Dimov, 2011; Lounsbury and Glynn, 2001) suggest that entrepreneurs elaborate particular strategies to obtain actor engagement and mobilize feedback and resources for opportunity development (Clarke, 2011; Santos and Eisenhardt, 2009; Zott and Huy, 2007). For example, scholars have argued that entrepreneurs use metaphors and analogies to describe and justify an opportunity to external actors (e.g., Cornelissen and Clarke, 2010). However, when opportunity development is considered as an entrepreneurial journey (Garud and Karnøe, 2003; Selden and Fletcher, 2015; Venkataraman *et al.*, 2012), that is, a process that unfolds over time, it becomes important for entrepreneurs not only to gain initial actor engagement but also to *sustain* this engagement to secure continued access to feedback and resources. This journey of opportunity development, and the social learning that accompanies it (Dimov, 2007; Dutta and Crossan, 2005), imply continued interactions with external actors.

To explain how entrepreneurs can sustain actor engagement, we conceptualize the process of opportunity development as an iteration of two phases: translation, during which the entrepreneur presents and adapts the opportunity to external actors, and transformation, during which the entrepreneur integrates actors' feedback in the opportunity. Following the extant literature, the initial translation phase is aimed at eliciting engagement from actors. We argue that it is the subsequent transformation and ongoing iterations between translation and transformation that ensure actors' sustained engagement, as actors learn and become committed to the opportunity. Further, focusing on the timing of this iterative process, we suggest that entrepreneurs can sustain external actor engagement by modifying both external actors' *subjective* perceptions of time (as experienced and interpreted by these individuals) and the *objective* (linear and measurable) timing of the opportunity development process.

We offer two contributions to the literature on opportunity development. First, we contribute to an emergence-based theory of entrepreneurship (Garud and Karnøe, 2003; Phan, 2004) by providing conceptual clarity about how entrepreneurs can sustain the generative role of external actors in the opportunity development process through iterations of translation and transformation. This is important because so far the literature has remained silent about

how entrepreneurs can continue to leverage external actors during the opportunity development process. In doing so, we move beyond the recognition that external actors are important providers of resources (Dimov, 2007; Maguire, Hardy, and Lawrence, 2004) to outline the specific process through which entrepreneurs sustain actor engagement in order to access these resources. We also provide a discussion of the boundary conditions under which external actors can be constructively engaged.

Second, we add to our knowledge of the range of influencing skills that entrepreneurs can use during the opportunity development process (Clarke, 2011; Zott and Huy, 2007). Existing research acknowledges the dynamic nature of opportunity development (e.g., O'Connor, 2004; Selden and Fletcher, 2015) and the importance of the entrepreneur's temporal capabilities, such as the pacing of strategic events (e.g., Gersick, 1994). Temporal capabilities are important because time can be a critical resource for entrepreneurs during actor engagement. We specify how entrepreneurs can use their temporal capabilities in order to sustain actor engagement by purposefully structuring the timing of interactions with actors and modifying actors' subjective perception of time. Specifically, entrepreneurs can adjust the duration of the translation and transformation phases by choosing when and how often to interact with external actors and by outlining the implementation of the opportunity as more or less distant in time—for example, in the form of an imminent or more distant new product launch. By specifying how entrepreneurs can use their temporal capabilities as a strategic resource during opportunity development, we add substance to Orlikowski and Yates' (2002: 690) notion that 'if the time is not ripe, then it should be your purpose to ripen the time.'

## OPPORTUNITY DEVELOPMENT IN ENTREPRENEURSHIP RESEARCH

Since Shane and Venkataraman (2000), the conversation in the entrepreneurship literature has turned to the nature of opportunities and the characteristics of entrepreneurs. While the discussion about the nature of opportunities continues (Davidsson, 2015; McMullen and Shepherd, 2006), several researchers (Cornelissen and Clarke, 2010; Garud and Giuliani, 2013; McMullen and Dimov, 2013) suggest that the field could move forward by

examining the opportunity development *process*, paying closer attention to ‘what aspiring entrepreneurs do’ (Dimov, 2011: 75).

Opportunities materialize when entrepreneurs exploit existing products, services, or business models or introduce novel ones. Prior research suggests that a relatively small proportion of entrepreneurs start their ventures based on novel opportunities because imitation facilitates opportunity development (Amason, Shrader, and Tompson, 2006; Bhide, 2000). We concentrate on opportunities involving *novel* products, services, or business models, because this subset of available opportunities is the hardest to develop, due to legitimacy deficits (Aldrich and Fiol, 1994; Zimmerman and Zeitz, 2002).

Three recent perspectives have focused on the opportunity development process and the important role of external actors, studying opportunity development as instituted in market structures, as artifact creation during the entrepreneurial journey, and as a social learning process.<sup>1</sup> Taken together, these three perspectives highlight the need for entrepreneurs to engage external actors in opportunity development to acquire resources and gain valuable feedback. Yet, in each of these perspectives, the opportunity, the process, and the interactions between entrepreneurs, actors, and the opportunity are conceived in slightly different ways, as we will explain.

### Opportunity development as instituted in market structures

In this perspective, opportunities have to adhere to societal standards, at least to some extent (Welter, 2011; Zahra and Wright, 2011). This means that when entrepreneurs introduce novel products, services, or business models, they have to undertake the difficult task of acquiring legitimacy (Aldrich and Fiol, 1994; Suchman, 1995; Tost, 2011). In order to do this, entrepreneurs present the opportunity to actors using linguistic tools such as analogies and metaphors (Cornelissen and Clarke, 2010; Snihur, 2016), storytelling (Lounsbury and Glynn, 2001), or visual symbols (Clarke, 2011).

Gaining legitimacy is not only a goal for the entrepreneur, but also the means by which actor

engagement is initially obtained. Following Polanyi (2001), Dimov (2011) suggests that ‘a vital part of opportunity pursuits is *the engagement of other market actors* as customers, suppliers, investors, employees, advisors, etc.’ (Dimov, 2011: 74, emphasis added). In other words, securing the participation of external actors is critical to opportunity development. As external actors make legitimacy judgments about the new venture, they become engaged in opportunity development, providing entrepreneurs with much-needed feedback and resources (Lounsbury and Glynn, 2001; Zott and Huy, 2007).

The literature suggests that in order to obtain engagement, entrepreneurs may need to adjust the way they present the opportunity to actors by changing its image. For example, Cornelissen and Clarke (2010: 549) claim that entrepreneurs need to ‘reinforce, adapt, or replace the initially induced image or scene of the venture, depending on the feedback of others’ in order to legitimize the opportunity. This notion that the opportunity needs to be adjusted for external actors is central to translation theory (Callon, 1986; Czarniawska and Sevón, 1996; Sahlin-Andersson and Engwall, 2002),<sup>2</sup> which posits that ideas change in content and meaning through collective exposure as they travel from one actor to another. This implies that the content of the opportunity can be *intentionally* adapted to specific actors: the entrepreneur can translate the same opportunity differently for different actors, depending on their characteristics. Thus, translation theory makes the editing of the opportunity itself (rather than its image) more explicit during interactions with actors.

Scholars following this line of research have examined various presentation strategies entrepreneurs use when communicating with external actors and the potential subsequent changes to the opportunity. However, the microprocesses of actor engagement, in particular how engagement might be *sustained*, have not been identified. Further, while these interactions take place over time, there are few indications about how the entrepreneur might modify temporal aspects of the process.

<sup>2</sup> This theory has been used to explain the transmission of ideas in organizations (Ansari, Fiss, and Zajac, 2010; Czarniawska and Joerges, 1996) or in societies at large (Zilber, 2006) and typically focuses on the adoption and transmission of ideas in established organizations (Sahlin and Wedlin, 2008) rather than on the creation of new ventures. For a recent review, please see Waaraas and Nielsen (2016).

<sup>1</sup> We are indebted to an anonymous reviewer for suggesting this classification.

### Opportunity development as artifact creation during the entrepreneurial journey

When opportunity development is considered from this perspective, a slightly different view emerges. First, in line with translation theory, the creation of an artifact implies an actual development of the opportunity over time, not just modification of the way it is presented. An artifact is defined as something made or shaped through the ‘actions and interactions of stakeholders’ (Venkataraman *et al.*, 2012: 26) that is not limited to physical objects (e.g., a wind turbine) but can also include a service, firm capability, or business model (Selden and Fletcher, 2015). For example, in their comparative study of the development of wind turbines in the United States and Denmark, Garud and Karnøe (2003: 295) show that the creation of innovative (technological) artifacts involves multiple actors who ‘gradually transformed the emerging path to higher functionalities.’

Second, this stream focuses closely on the notion of an opportunity development *process*. For example, Selden and Fletcher (2015) examine opportunity development from the initial business idea all the way to the formation of technological clusters. They view the entrepreneurial journey as the entire sequence of events when ‘artifacts created at lower levels are designed as contextual to the emergence of more tangible artifacts at higher levels’ (Selden and Fletcher, 2015: 604). Other authors have examined the timing of various business-building activities, such as hiring employees or completing an initial public offering (IPO) (Gersick, 1994; Lichtenstein *et al.*, 2007).

Opportunity development seen from this perspective involves interactions with external actors over time, leading to the evolution of an opportunity. One important implication of this is that entrepreneurs not only need to gain actor engagement at a certain point in time, but also have to sustain it over the duration of the entrepreneurial journey. This argument has received only scant attention so far.

### Opportunity development as a social learning process

Finally, the social learning perspective conceptualizes opportunity development as a process that involves external actors and emphasizes the entrepreneurial learning that takes place within it. Dutta and Crossan (2005) apply the organizational learning framework developed by Crossan, Lane, and White (1999) to

characterize opportunity development through four mechanisms: intuiting, interpreting, integrating, and institutionalizing. While intuiting is an intra-individual process, interpreting and integrating imply language-based interactions with other actors, building shared understanding that is later institutionalized in organizational routines. Extending this work, Dimov’s (2007) conceptualization of opportunity development involves the elaboration, refinement, change, or even discarding of initial ideas through social exchanges with external actors who contribute valuable information and feedback.

The social learning approach expands the process view of opportunity development by suggesting that learning occurs throughout the opportunity life cycle (Cope, 2005; Ravasi and Turati, 2005). It also emphasizes the multilevel and dynamic nature of learning as it moves between individual, group, and organizational levels through feedback loops (Crossan *et al.*, 1999). One important implication of this literature is that the entrepreneur learns from interactions with external actors throughout the development process (Harrison and Leitch, 2005; Minniti and Bygrave, 2001; Ravasi and Turati, 2005) and, as a consequence, also learns to interact with actors over time (Cope, 2005).

### Integration of the three perspectives

We integrate the insights provided by these three perspectives to propose a process model of opportunity development that focuses on how to *sustain the engagement of external actors*. Specifically, we build our model on three main premises derived from the literature. First, to initiate actor engagement, entrepreneurs need to intentionally adapt the opportunity when presenting it to external actors. Second, opportunity development unfolds over time. It benefits from continuous access to external actors’ feedback and resources, but this requires the entrepreneur to sustain actor engagement. Third, both entrepreneurs and external actors learn from their interactions throughout the opportunity development process, which helps sustain the engagement of external actors.

Next, we present our model of opportunity development (Figure 1), develop the links between the translation and transformation phases and sustained actor engagement, and discuss the iterative nature of the process (indicated by the iterative loop). Subsequently, we examine the constructs related to

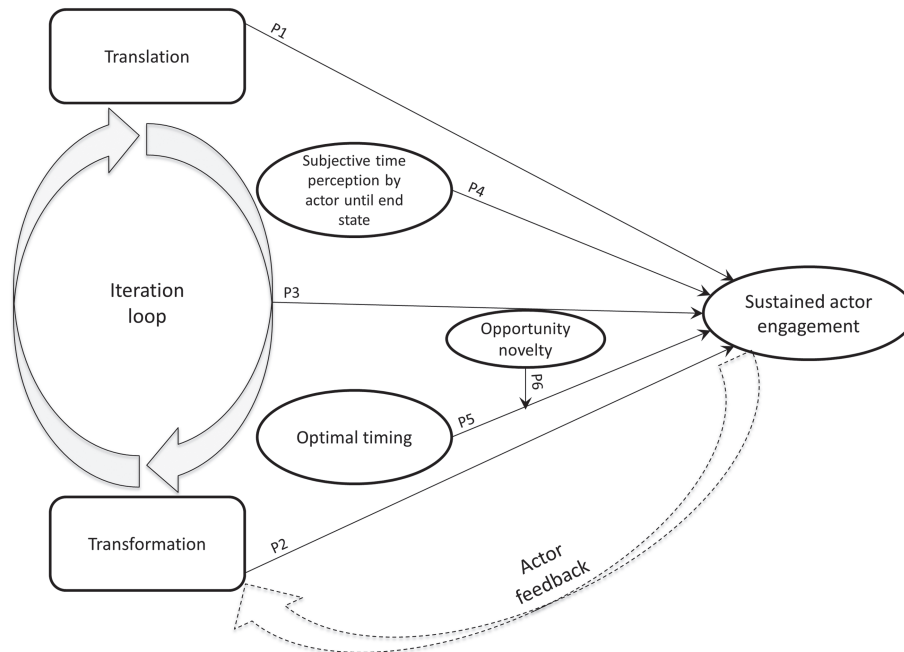


Figure 1. A process model of sustaining actor engagement during opportunity development

process timing, which we claim the entrepreneur can modify to influence actor engagement, as indicated in the central part of Figure 1.

## SUSTAINING ACTOR ENGAGEMENT DURING OPPORTUNITY DEVELOPMENT

Opportunity development begins when an opportunity is exposed to others, often through a search for resources (Zott and Huy, 2007), and continues through the entrepreneur's iterative engagement with external actors during phases of translation and transformation.

### Translation: gaining actor engagement

We argue that translation (when the entrepreneur presents and adapts an opportunity to external actors) is a prerequisite for actor engagement.

First, to initiate engagement, entrepreneurs make an opportunity more comprehensible by relating it to existing content and cultural artifacts relevant to the actors. The environment into which an entrepreneur aims to introduce an opportunity is typically made up of norms, approaches, and solutions that are invested with social significance and that might differ

from those the opportunity entails (Aldrich and Fiol, 1994; Hargadon and Douglas, 2001). As a result, there can be incongruities between an opportunity and external actors' expectations of what is considered acceptable. To achieve engagement, the entrepreneur has to sell an opportunity to actors by translating it, which involves describing it in and adapting it to local terms (Czarniawska and Sevón, 1996), establishing a connection between the opportunity and what actors consider appropriate.

Second, translation helps actors change their expectations of an opportunity. Translation involves describing possible future versions of an opportunity (i.e., novel products, services, business models, etc.). This allows actors to imagine their local context in a different way and to formulate and reflect on their beliefs and expectations. Translation also helps actors assess an opportunity vis-à-vis existing standards and practices (Seo and Creed, 2002) and think about the context to which the opportunity will be introduced (Tost, 2011), which may alter their frames of reference and foster engagement.

Translation is a time- and effort-dependent process (Zilber, 2006), requiring attention from the entrepreneur. Entrepreneurs need to carefully craft representations of the opportunity to match actors' expectations and to convey the opportunity in a way that is consistent with their frames of reference. This is particularly the case when the entrepreneur needs

to develop multiple strategies for translating the opportunity (Suddaby and Greenwood, 2005; Zott and Huy, 2007). For example, the existence of multiple external actors with different expectations may require entrepreneurs to tailor individual representations of the opportunity for each actor. In sum, producing rich forms of translation that enable actors to form and/or change their expectations about an opportunity is crucial to initiate actor engagement. We, therefore, formulate the following baseline proposition:

*Proposition 1: The entrepreneur is likely to gain actor engagement in the opportunity development process through translation of the opportunity.*

### **Transformation: sustaining actor engagement**

Entrepreneurs gain actor engagement during translation; sustaining actor engagement is contingent on transforming the opportunity as a result of actor feedback. If actor feedback is ignored, actors are more likely to disengage from opportunity development. Transformation is the process through which entrepreneurs combine (positive or negative) actor feedback with the existing features of an opportunity, developing it further. In line with the learning perspective on opportunity development (Dimov, 2007; Dutta and Crossan, 2005), transformation is initiated by the entrepreneur to reflect the learning and new ideas obtained through previous actor engagement. For instance, PayPal was originally developing security software for handheld devices when eBay users started to use its software as a payment method on eBay (Jackson, 2006). Based on interactions with these external actors, PayPal transformed its business model to focus on payment processing.

Entrepreneurs can use transformation in two ways to nudge an opportunity closer to what actors' feedback reveals as appropriate and viable: by incorporating feedback and by further developing actors' beliefs in an opportunity and their interpretations of it.

First, the process of incorporating feedback from external actors involves reducing incongruities in the opportunity, which may imply reducing or making its original novelty less visible in relation to the perceptions of the actors. The development of an opportunity is likely to be influenced by the

interpretative schemas, attributions, interests, and needs of those who assess it (Mandler, 1982), as well as by the norms and rules of the context in which actors are embedded (Scott, 2008). An opportunity might appear more novel to some actors (e.g., regulators) than to others (e.g., software programmers). Transformation, therefore, aims to reduce the incongruity between an opportunity's novelty and the expectations of external actors, revealed through their feedback. For example, Hargadon and Douglas (2001) describe how Edison embedded a novel product and business model for electric lighting in a familiar design (gas lighting) in order to tap into existing customer perceptions. In this way, Edison facilitated the understanding of a new technology by making it analogous with the older and more familiar gas distribution system.

The feedback actors provide will include specific knowledge or expertise (Zott and Huy, 2007), social cues, and cultural or industry norms (Rindova and Petkova, 2007). This will help the entrepreneur determine which features of the opportunity to maintain, transform, or drop. Transformation makes an opportunity appear more understandable and similar to existing content that is familiar to the actors, reducing or making some, but not necessarily all, novel features of the opportunity less visible.

Second, actors are influenced by transformation and learn from it. If they actively provide feedback, they will have a greater sense of involvement, commitment, and ownership of the process (see Lawrence, Hardy, and Phillips, 2002), becoming more engaged. Their involvement may also lead them to reflect on the contradictions inherent in the current product, service, or business model. This can increase their belief in the opportunity and the form it takes (Emirbayer and Mische, 1998; Seo and Creed, 2002). Through repeated engagement, actors increasingly share cognitive representations with the entrepreneur (Trope and Liberman, 2010), while learning more about the opportunity.

Transformation also demands time and effort. An entrepreneur who develops an opportunity in more nuanced ways that match actors' expectations will be able to sustain their engagement in the opportunity development process. We propose:

*Proposition 2: The entrepreneur is likely to sustain actor engagement in the opportunity development process through transformation of the opportunity.*

### Sustaining actor engagement through the iteration of translation and transformation

While it is possible for an opportunity to be developed through a single cycle of translation and transformation, in most cases, both occur iteratively, often in a nonlinear way over time. Consecutive cycles of translation and transformation (for instance with venture capitalists or customers) not only help refine the opportunity based on actor feedback, but also help sustain actor engagement. Through repeated iterations, an opportunity can be nudged closer to what the actors consider appropriate by reducing the relative novelty of the opportunity with regard to the actors and by developing, or even altering, actors' beliefs in and interpretations of the opportunity. Repeated contact with the opportunity reduces the likelihood that actors will perceive an opportunity as illegitimate due to its novelty. For example, in their study of the development of the safety bicycle, Pinch and Bijker (1984) show how continuing interactions between producers, customers, and other relevant actors led to a commonly understood and expected configuration of the safety bicycle's attributes.

Translation and transformation will also have a positive impact on actor engagement by demonstrating the entrepreneur's openness to feedback. This process does not have to be progressive and linear, as the entrepreneur might decide to revert to an earlier version of the opportunity. Integrating and reconciling diverse feedback within the opportunity produces a substantiated version that only *partially* reflects the feedback provided by each set of actors. This triggers the need to translate the opportunity back to actors, leading to additional rounds of translation and transformation. The development of this process over time is likely to keep external actors engaged.

For example, Kiva, an online microfinance lending start-up founded by Matt Flannery and Jessica Jackley in 2005, has been developing the opportunity to connect small, low-income entrepreneurs around the world with lenders in developed countries (Moss, Neubaum, and Meyskens, 2015). In 2005, this was a highly novel opportunity, combining a relatively new technology (the internet), anticipated online social networking between borrowers and lenders (influenced by Web 2.0), and a complex and novel business model. Although Kiva displayed entrepreneurs' photos and stories prominently on its website, the entrepreneurs worked with local microfinance institutions (MFIs) to receive and repay

loans, rather than directly with Kiva. Kiva engaged in iterative translation and transformation with customers, volunteers, MFIs, and regulators. Flannery (2007: 41) described one cycle in which entrepreneurs transformed the original business model by eliminating interest rates on Kiva loans after (informal) negative feedback from the U.S.'s Securities and Exchange Commission (SEC), which queried the legality of charging interest rates on entrepreneurial financing. Transformation (respect for financial regulations) was necessary to continue operating and to sustain the engagement of the SEC (a highly relevant external actor).

In another cycle, Kiva was transformed into a 'technology platform for microfinance institutions alleviating poverty' (Flannery, 2007: 50) through the development of a risk-rating system for the MFIs. This resulted in Kiva becoming 'an eBay for microfinance institutions' (Rockrohr, 2008). This transformation was due to the feedback from MFIs about the high costs of reaching additional entrepreneurs. Scaling became much easier when Kiva developed a platform for MFIs instead of working directly with entrepreneurs. This transformation also helped Kiva to sustain the engagement of MFIs, whose interest in such a platform was high, as it allowed them to be rated and helped raise additional funds (Aaker, Chang, and Jackley, 2010). The shape of Kiva's business model 10 years on differs in several ways from its original idea for direct peer-to-peer lending (Flannery, 2007, 2009). This example shows that transformations were necessary to keep the actors central to Kiva's operation (the SEC, MFIs) continuously engaged.

Based on our arguments about how the iteration of translation and transformation affects actor engagement, we propose:

*Proposition 3: The entrepreneur is likely to sustain actor engagement in the opportunity development process through iterations of translation and transformation of the opportunity over time.*

### TEMPORAL STRUCTURING OF THE OPPORTUNITY DEVELOPMENT PROCESS

While scholars acknowledge the dynamic nature of opportunity development, few studies have examined how entrepreneurs might use time purposefully as a

resource to sustain actor engagement. Management scholars have introduced the concept of temporal capability, defined as ‘the ability to comprehend various temporal conceptions about change (e.g., clock, inner, social times) and dimensions (e.g., sequencing, timing, pacing), to discriminate against them, and to use this information to guide thinking and action’ (Huy, 2001: 610). Temporal capabilities may involve the pacing of strategic events (Gersick, 1994) or viewing present and future events with different mind-sets (Miller and Sardais, 2015). We examine how an entrepreneur can use temporal capabilities to facilitate external actor engagement over time.

Research commonly differentiates between objective and subjective conceptualizations of time (Ancona, Okhuysen, and Perlow, 2001b; Crossan *et al.*, 2005). Specifically, while time can be ‘objectively portrayed and interpreted based on the measured, linear, forward-moving, and exact clock time’ (Ancona *et al.*, 2001a: 646), it can also reflect the subjective experience of each individual (Staudenmayer, Tyre, and Perlow, 2002). The objective timing of entrepreneurial activities has been explored in the entrepreneurship literature (e.g., Delmar and Shane, 2004; Lichtenstein *et al.*, 2007), but only a few studies examine how entrepreneurs experience and interpret time (Fischer *et al.*, 1997; Miller and Sardais, 2015; Morris *et al.*, 2012). We explain how entrepreneurs can influence both the *subjective* perception of time by external actors and the *objective* time of the opportunity development process to sustain actor engagement.

### Subjective perception of time and actor engagement

We argue that entrepreneurs can change actors’ perception of the time remaining (long or short) until opportunity implementation, such as the manufacturing of a new product or the launch of a new business model, in order to foster continued engagement. That is, they can use actors’ subjective perceptions of time as a strategic resource to acquire valuable feedback and engage actors’ interest, and, in the best case, generate actors’ commitment to an opportunity.

The subjective experience of time is likely to vary across situations and actors (Ancona *et al.*, 2001b). A common way to conceptualize subjective perceptions of time is through temporal construal

theory (Liberman and Trope, 1998), which suggests that cognition is affected by the perceived proximity of an event in time, or temporal distance (Forster, Friedman, and Liberman, 2004). Temporal construal theory posits that while individuals are likely to use abstract features in construing distant-future events, they will draw on more concrete features in construing near-future events (Liberman and Trope, 1998). As a result, actors may alter their judgments about an opportunity depending on their perceptions of the temporal distance until the end of the development process, represented by the launch of a new product, service, or business model. During translation, entrepreneurs communicate a representation of an opportunity that will be implemented either in the near or a more distant future. If the entrepreneur represents a concrete opportunity that is achievable in the short term, temporal construal theory predicts that actors are more likely to focus on the *negative* aspects of the opportunity rather than on its desirable aspects (Alexander, Lynch, and Wang, 2008; Liberman and Trope, 1998). This is because actors will be more pessimistic about the likelihood that the novel opportunity will succeed in substituting a prevailing product, service, or business model in the short term and will be less willing to commit time and effort that will be taken away from other activities. As a result, the incongruity between the opportunity and actors’ beliefs is less likely to be reduced, the opportunity may not be sufficiently understood, and actors might be less interested in engaging with it.

In contrast, when entrepreneurs represent an opportunity achievable in a more distant future, temporal construal theory predicts that actors will focus less on feasibility issues and concentrate instead on the desirability and ultimate value of the opportunity (Alexander *et al.*, 2008; Liberman and Trope, 1998). Therefore, actors will more likely engage with the development of the opportunity when they perceive a long, rather than short, temporal distance until the end state of the process. Following this logic, we propose:

*Proposition 4: Increasing actors’ subjective perceptions of the time available until the end state of the development (e.g., the launch of the new product, service, or business model) increases the likelihood of sustaining actor engagement with the opportunity development process.*



### Objective time and actor engagement

Entrepreneurs can also influence objective (clock) time to sustain actor engagement. We argued earlier that translation and transformation are both time- and effort-sensitive processes. The timing of these phases with different external actors will be important to sustain actor engagement.

#### *Optimal pacing*

Pacing refers to ‘how quickly an event unfolds during a series of events or density of events per unit of time’ (Huy, 2001: 605). It has been used to discuss the temporal structuring of interim evaluation instances that divide innovation projects (Sheremata, 2000); for example, in the case of the Stage-Gate development model (Cooper, Edgett, and Kleinschmidt, 2002). Pacing can be abrupt and rapid, moderately fast, or gradual, depending on how deadlines are set and managed.

Interacting regularly with external actors should increase actor engagement, as it keeps actors involved and develops their sense of commitment and ownership of the opportunity development process (Lawrence *et al.*, 2002). For instance, Hallen and Eisenhardt (2012) describe how *casual dating* (informal but deliberate repeated meetings with a few potential partners) improves entrepreneurs’ efficiency in acquiring funding. But what is the optimal pacing for these interactions?

A long time lag between instances of actor engagement may have negative implications for opportunity development because actors’ frames of reference are more likely to change as the time since their introduction to the opportunity increases (Bitektine, 2011). Also, actors who have not been involved with an opportunity or consulted about it for a long time are more likely to lose interest in it (Child, Lua, and Tsai, 2007).

However, a shorter time lag between instances of engagement might prevent the entrepreneur from using multiple strategies to translate and/or transform the opportunity (Zimmerman and Zeitz, 2002). As Hallen and Eisenhardt (2012: 46) comment, short time lags make ‘communication less productive, familiarity more difficult to gain, and positive affect less likely’ during actor interactions. Similarly, a shorter time lag will limit the entrepreneur’s ability to transform the opportunity by integrating and reconciling actor feedback.

We suggest that there is an optimal length of time for managing actor engagement during the translation and transformation cycles. If the time taken by the entrepreneur to interact with the actors is too long, actors might become less engaged in the process, losing interest because the opportunity becomes less relevant and salient to them. Conversely, if the entrepreneur takes too little time to translate and transform the opportunity, actors are more likely to disengage because they will perceive that the entrepreneur has made insufficient effort to incorporate their feedback. Therefore, we propose:

*Proposition 5: The time taken by the entrepreneur to complete a cycle of translation and transformation follows an inverted U-shaped relationship with the likelihood of sustained actor engagement in the opportunity development process such that too little or too much time spent in each instance leads to actor disengagement.*

#### *Optimal pacing and opportunity novelty*

The timing of engagement events will also depend on the degree of opportunity novelty; more novel opportunities require more development to reduce incongruities with actors. Note that while our model focuses on novel opportunities, some opportunities can be perceived as more novel than others (see, for example, the classic distinction between radical and incremental innovations, e.g., Damanpour, 1991). Further, the perception of novelty can differ across distinct groups of actors. For instance, in our Kiva example, the platform to provide peer-to-peer financing was not radically new to the software engineers; however, the business model was very difficult to reconcile with the existing financial regulations of the SEC. Opportunity novelty is also contingent upon the context of the actors to whom it is introduced (Birkinshaw, Hamel, and Mol, 2008). While knowledge, expertise, and technical know-how facilitate the understanding of an opportunity, cognitive, social, cultural, and institutional factors also play an important role in enabling or constraining this understanding. Specifically, the more novel an opportunity is to a given set of actors and a specific context, the greater the incongruities will be between the opportunity and actors’ prevailing beliefs and frames of reference.

Because of these incongruities, it will be more difficult and time consuming for actors to assess the potential value of more novel opportunities. As a result, the entrepreneur will have to make greater efforts to translate the opportunity by appealing to a wider variety of shared meanings, symbols, and conventions. Incongruities will also make it more difficult for actors to form a clear understanding and straightforward expectations of their role (Bitektine, 2011), making entrepreneur-actor interactions more uncertain (Birkinshaw *et al.*, 2008). While actors' expectations will evolve as they gain a better understanding of the opportunity, their reactions and feedback are more likely to be equivocal, confusing, and potentially contradictory and will need to be reconciled through additional development, increasing the time needed for transformation. For instance, Ansari, Garud, and Kumaraswamy (2016) describe how TiVo, a start-up that pioneered digital video recording in the U.S., reconciled the feedback from diverse actors, including advertisers and cable manufacturers; however, this took a great deal of time, according to a TiVo executive cited in the text.

A higher degree of novelty leads to greater incongruities between the opportunity and actors, which implies that more time and effort are necessary for the opportunity to be understood and accepted by actors. Hence, entrepreneurs should be prepared to devote more time to each phase of the process. We propose:

*Proposition 6: Opportunity novelty moderates the inverted U-shaped relationship between pacing and sustained actor engagement such that opportunities with higher novelty will require a slower pace of translation and transformation to sustain actor engagement.*

## DISCUSSION

To address the gap in the literature on opportunity development, we conceptualize a process model that explicitly considers how to sustain the engagement of external actors. A better understanding of the *how* and *when* of entrepreneur-actor interactions during opportunity development is essential to more contextualized entrepreneurship research (Davidsson and Wiklund, 2001; Dimov, 2007, 2011; Zahra and Wright, 2011). To that end, we provide testable

propositions about the factors that influence how entrepreneurs can sustain actor engagement, focusing on the process structure (i.e., translation, transformation, and their iterations) and the temporal structure (i.e., subjective and objective timing). Our conceptualization has several implications for entrepreneurship research, emphasizing the importance of: (1) the iterative nature of the opportunity development process, which enables the generative role of external actors; and (2) the timing of actor engagement.

### Opportunity development process and the generative role of external actors

The entrepreneurship literature tends to assume that the intrinsic value of an opportunity is the most important predictor of its success (e.g., Ardichvili, Cardozo, and Ray, 2003; Gruber, MacMillan, and Thompson, 2013). However, given recent social constructivist arguments about how opportunities might be created by entrepreneurs (Alvarez and Barney, 2007; Sarason, Dean, and Dillard, 2006), it remains difficult, if not impossible, to determine this intrinsic value *ex ante* (Davidsson, 2015). Consequently, we emphasize that the development *process* itself can have a strong impact not only on the ultimate success of an opportunity, but also on its ultimate form.

Specifically, we highlight the role of *actors*, who affect opportunity development by providing resources and positive or negative feedback during their engagement with the process. Wood and McKinley (2010: 72) argue that the 'cognitions and beliefs of outside actors are influenced by the entrepreneur,' while Denrell, Fang, and Winter (2003) suggest that serendipity and mistakes produce novelty. Our process model details the role of external actors during opportunity development, adding to the recent literature examining entrepreneurship as a coevolutionary, collective process (Clarke, Holt, and Blundel, 2014). We maintain that external actors play a *generative* role in the opportunity development process; our model assumes that actor engagement is useful and necessary for opportunity development because it provides entrepreneurs with resources and positive or negative feedback. By contrast, actor disengagement would prevent entrepreneurs from receiving enough feedback and stymie or slow down the opportunity development process: for instance, Garud and Karnøe (2003: 289) explain how the

reduced feedback from (disengaged) users had a negative impact on the U.S. wind turbine industry because new firms rushed to commercialize ‘an immature and untested technology.’

However, the sustained engagement of some actors may be more beneficial than others, demonstrating the need for entrepreneurs to engage actors selectively. Some actors might also be less forthcoming with feedback. Specifically, not all actors will react positively to an opportunity—some might be unenthusiastic or even unwilling to engage. However, entrepreneurs can learn from actor resistance and negative feedback. Hargadon and Douglas (2001: 493) explain, for instance, how Edison’s first attempt to commercialize his invention of the phonograph was unsuccessful; he promoted it to business people as a device to ‘take dictation without a stenographer.’ After a decade of repeated negative feedback from customers, Edison succeeded in developing the opportunity offered by the new product by transforming the phonograph into a device to reproduce music. Thus, entrepreneurs have to be attentive to actor resistance during opportunity development, as it might signal a need for a more radical opportunity transformation. We encourage future research to examine further the conditions under which opportunity development could continue despite the resistance or even disengagement of some actors.

Further, it is possible that a certain threshold of actor agreement needs to be achieved for opportunities to be exploited, meaning that entrepreneurs have to sustain the engagement of at least some relevant actors to continue the development. Some actors will be strategic or critical to the development of the opportunity, as the SEC was in the Kiva example. Entrepreneurs might decide not to engage certain actors or to engage them at different stages of the opportunity development process. For example, engaging actors who could become potential competitors could be dangerous at an early stage of development, as entrepreneurs have to protect their ideas from imitation.

### Timing of actor engagement

Our theorizing emphasizes an agentic notion of time, which serves as a strategic resource for often resource-poor entrepreneurs. For example, we argue that temporal construal theory, which has been tested for consumer purchasing behavior (Alexander *et al.*,

2008) or the entrepreneurial evaluation of opportunities (Tumasjan, Welpe, and Spörrle, 2013) can be applied to assess the likelihood of sustaining actor engagement, depending on how actors perceive the time lag (long or short) until the end state of the development. Thus, we initiate a discussion about how entrepreneurs can time their interactions with external actors, pacing actor engagement to balance the tension between introducing novelty and mobilizing resources and feedback.

There is evidence that learning and innovation may not fit easily with imposed timelines and timetables that consist of discrete, measurable activities with predictable durations and interactions (Garud, Gehman, and Kumaraswamy, 2011). While we agree that the overall opportunity development process is often nonlinear, iterative, and emergent, our conceptualization highlights that an entrepreneur’s pacing of the overall *process* (rather than timing every actor interaction) is a precondition to continued engagement.

By adding a temporal lens (Ancona *et al.*, 2001b) to the understanding of sustained actor engagement, we also offer new dependent and independent variables for entrepreneurship research (e.g., optimal pacing of actor engagement, entrepreneur’s temporal capabilities). While studies have hinted at the importance of temporal capabilities for managers in general (Huy, 2001; Reinecke and Ansari, 2015), entrepreneurship scholars have been relatively silent on this issue (for exceptions, see Gersick, 1994; Lichtenstein *et al.*, 2007; Miller and Sardais, 2015). Our arguments suggest that examining the influence of timing—and, by extension, entrepreneurs’ temporal capabilities—is not only useful when establishing a legal entity or writing a business plan (Delmar and Shane, 2004), but also when interacting, often iteratively, with a variety of actors.

### Future research agenda

Through our work, we push entrepreneurship researchers to ask new questions and reformulate existing ones, focusing in particular on sustained actor engagement during opportunity development and entrepreneurs’ temporal capabilities. While we agree with McMullen and Dimov (2013), who stipulate that researchers should examine the entrepreneurial journey in its entirety, process research could be complemented by examining the sequencing and pacing of *interactions* between the entrepreneur and

other actors. We suggest three promising directions for future research based on our work: (1) further integrating the entrepreneurial learning perspective with an actor engagement view; (2) examining more thoroughly the characteristics that can lead to sustained actor engagement (or disengagement); and (3) testing our model at different levels of analysis to determine how it could be integrated into the holistic examination of the entrepreneurial journey.

First, an interesting extension of our work would be to combine the sustained actor engagement view and the entrepreneurial learning perspective (Dimov, 2007; Dutta and Crossan, 2005). While we know more about how entrepreneurs learn, our article focuses on external actors and the importance of considering their expectations and feedback over time, especially in the case of highly novel opportunities. Future research could examine if and how entrepreneurs can influence or generate *actor* learning. We expect that this would be more challenging for actors who are embedded in a highly institutionalized field characterized by rigid norms and regulations. It would also be interesting to understand better how an entrepreneur learns as a result of the opportunity development process, which might influence subsequent actor engagement tactics. For instance, how can entrepreneurs learn from actor disengagement or resistance to a given opportunity?

These questions are particularly relevant for habitual entrepreneurs or entrepreneurs involved in more than one venture (Westhead and Wright, 1998). Are habitual entrepreneurs better able to sustain actor engagement through the use of temporal capabilities than novice (first-time) entrepreneurs? Is it easier to develop temporal capabilities for entrepreneurs managing several ventures concurrently (i.e., portfolio entrepreneurs) than for entrepreneurs engaged in developing only one venture at a time? What is the influence of business failure (e.g., Ucbasaran *et al.*, 2010) on developing temporal capabilities? And more generally, how are temporal capabilities developed? Recent evidence suggests that habitual entrepreneurs engage in complex patterns of resource orchestration in their portfolios of ventures (Baert *et al.*, ), but we know little about how habitual entrepreneurs manage time as a strategic resource and how entrepreneurs develop or improve the extent of their temporal capabilities.

Second, another promising direction would be to apply Suchman's (1995) classification of legitimacy (cognitive, moral, and pragmatic) to distinct groups

of actors embedded in different contexts. As Garud and Karnøe (2003: 281) put it, entrepreneurship is 'a process of mindful deviation,' during which entrepreneurs have to engage external actors and often moderate the novelty of opportunities to fit better with their varied expectations. From a theoretical point of view, a more detailed examination of the types of legitimacies that are more important to specific types of actors could be warranted. For instance, would providing proof of the moral legitimacy of a new product help sustain the engagement of a regulatory agency? More generally, which actors should be engaged first—those who are likely to react positively or negatively to the opportunity? Our model does not explicitly consider when entrepreneurs should give up on engaging a given group of actors and start engaging another. The decision about when to end engagement will depend on factors such as the criticality of a particular set of actors for the continued development process or the accessibility of another more relevant set. From a research perspective, these questions are best explored empirically through case studies or ethnographic research, as context is critical in making these decisions.

Third, future research could examine how our model applies to different levels of analysis and test it empirically (McMullen and Dimov, 2013). For instance, translation and transformation can occur within a new venture among *individual* members of the founding team, at the *organizational* level between the firm and external actors, and at the *industry* level, where translation and transformation could be useful to understand nascent industries. It would be interesting to examine whether our model could be applied at different hierarchical levels, as suggested by Selden and Fletcher (2015: 606, Figure 1), extending beyond the development of a new business model to the emergence of new industries. To which extent do our propositions hold at different levels? For instance, our model highlights the additional complexity that greater degrees of novelty (relative to different actors) bring to opportunity development, which may require collaboration among multiple entrepreneurs in nascent industries (Aldrich and Fiol, 1994; Navis and Glynn, 2010). Extending our model to different levels of analysis (e.g., founding team, nascent industry) might be both interesting and challenging.

Finally, we note some implications related to the empirical testing of our model. Given the complex interrelations during the opportunity development

process between opportunity, entrepreneur, and actors over time, our arguments call for a longitudinal or experimental design. An in-depth study of a particular industry could provide a useful context, offering the possibility to contrast variations of the development process. Such a study could look, for instance, at the ongoing changes to an opportunity introduced by entrepreneurs who innovate business models within the peer-to-peer lending or music industries or track novel product introductions over time in the mobile phone or automobile industries. Experiments have been used repeatedly to test temporal construal theory

(Lieberman and Trope, 1998; Tumasjan *et al.*, 2013) and could also help test our propositions about timing.

Table 1 summarizes a set of sample questions to guide future research.

### Implications for entrepreneurial practice

We suggest that entrepreneurs can recognize and act upon different actors' expectations; this is particularly relevant in cases of novel opportunity development, where misalignments between actors and entrepreneurs are more likely. Entrepreneurs can

Table 1. Actor engagement view of opportunity development: questions for future research

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*Entrepreneur's temporal capabilities: objective timing and the subjective perception of temporal distance*

- What reaction can entrepreneurs expect from actors when engaging in repeated cycles of translation and transformation? For instance, would repeated interactions reduce the optimal pacing for actor engagement?
- Are habitual entrepreneurs better able to sustain actor engagement through the use of temporal capabilities than novice (first-time) entrepreneurs? Is it easier to develop temporal capabilities for entrepreneurs managing several ventures concurrently (portfolio entrepreneurs) than for entrepreneurs developing one venture at a time? How are temporal capabilities developed? Can temporal capabilities be taught?
- To what extent does the strategic management of temporal distance during actor engagement by the entrepreneur impact the success and speed of the opportunity development process?
- How would the importance of temporal distance change when considering different levels of analysis, such as the interaction between entrepreneurs within a team, opportunity development by a single firm, or market creation by a group of firms?
- How should temporal distance be operationalized in empirical research: as an objective measure (i.e., useful in experiments); as a subjective time perception (i.e., used in a survey); or as a combination of both?
- How can the existence of optimal pacing be empirically established and compared across different actors (e.g., customers, partners, investors, regulators)? To what extent can entrepreneurs with previous knowledge about optimal pacing increase the success rate of opportunity development?

*Actor characteristics*

- Which types of legitimacy concerns are more important for which group of actors? How can entrepreneurs deal with the legitimacy concerns of different types of actors? How can these be operationalized and tested empirically?
- How and to what extent can entrepreneurs influence or generate actor learning during the opportunity development process?
- Under what conditions can opportunity development continue despite resistance from some actors or even disengagement?
- How are disagreements and discrepancies between different actors' beliefs and expectations resolved by the entrepreneur?
- How would the importance of actor characteristics change when considering different levels of analysis, such as the interaction between entrepreneurs within a team, opportunity development by a single firm, or market creation by a group of firms?

*Opportunity novelty*

- What kind of learning can be generated by entrepreneurs engaged in highly novel opportunity development? Is this learning transferable to developing less novel opportunities?
- How much iteration of translation and transformation of more or less novel opportunities is necessary in different industries?
- How would the importance of opportunity novelty change when considering different levels of analysis, such as the interaction between entrepreneurs within a team, opportunity development by a single firm, or market creation by a group of firms?
- How should the degree of opportunity novelty be operationalized in empirical research?

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exercise agency when choosing *how* and *when* to engage actors by explicitly adjusting the structure and timing of opportunity development, being mindful of subjective perceptions of time as well as the objective (clock) time the process takes. For example, we can speculate that entrepreneurs might want to start the process by translating an opportunity only to actors who are more favorable toward it, in order to address initial problems before engaging other actors. Further, entrepreneurs can extend the time lag actors perceive until the end of the development process, depending on the expected level of actor resistance (i.e., increase the time lag for higher levels of resistance). At the same time, entrepreneurs have to be careful not to prolong opportunity development beyond the optimal timing threshold of particular actors to avoid their becoming disengaged. Additionally, entrepreneurs have to consider actor feedback seriously in order to sustain actor engagement, and this might involve additional cycles of translation and transformation. In sum, we emphasize the role of time and actor feedback as important resources that can be used by skillful entrepreneurs to increase the odds of opportunity development success.

## CONCLUSION

Our aim in this article has been to clarify how entrepreneurs can sustain actor engagement during the opportunity development process. We propose a process model of opportunity development composed of two iterative phases of translation and transformation that foster sustained actor engagement. We also theorize about the role of subjective and objective timing in facilitating sustained actor engagement during opportunity development. We conclude by discussing the future research agenda to understand, explain, and test how the process and timing of opportunity development affect actor engagement, as well as the role of entrepreneurs' temporal capabilities.

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