



ENROLLING STAKEHOLDERS UNDER CONDITIONS OF RISK AND UNCERTAINTY

BARCLAY L. BURNS, JAY B. BARNEY, RYAN W. ANGUS,
and HEIDI N. HERRICK*

David Eccles School of Business, University of Utah, Salt Lake City, Utah, U.S.A.

Research summary: *Entrepreneurs often need resources controlled by stakeholders to form and exploit opportunities. While many of these resources can be acquired through simple contracts, the acquisition of some may require efforts on the part of stakeholders that go beyond what can be specified contractually. Such efforts—extra-role behaviors—generally involve the formation of deep psychological bonds between stakeholders and entrepreneurial endeavors. In an entrepreneurial context, the process of creating these bonds can be called stakeholder enrollment. Critical attributes of this process are shown to vary by the informational setting (risky or uncertain) within which entrepreneurship takes place.*

Managerial summary: *Entrepreneurs often need to gain access to resources controlled by other stakeholders to be successful. In some cases, entrepreneurs must induce these stakeholders to form deep psychological bonds in order to obtain the required resources. The process of creating these bonds is called stakeholder enrollment. This article notes that entrepreneurs can use information about the nature of the opportunity they are pursuing, information about themselves (i.e., the entrepreneurs' charisma, trustworthiness, and reputation), or both, to enroll stakeholders. This article suggests that the more uncertain a particular opportunity is, the less entrepreneurs can use information about the opportunity and the more they must rely on information about themselves to successfully enroll stakeholders. Copyright © 2015 Strategic Management Society.*

INTRODUCTION

Entrepreneurs often need resources they do not control in order to form and exploit opportunities (Cooper, Woo, and Dunkelberg, 1989). These resources range from financial to human capital, from technical and marketing expertise to accounting capabilities, and from direct social ties to indirect networks and affiliations (Freeman, 1984). Some of these resources can be obtained through simple

contracts between an entrepreneur and the stakeholders who control these resources (Argyres and Mayer, 2007). However, other resources can be acquired only when those providing them are more deeply committed (Klein, Molloy, and Brinsfield, 2012) to an entrepreneurial endeavor (Shane, 2000). In entrepreneurial settings, the process of creating this deeper level of commitment can be called *stakeholder enrollment*.

A substantial literature describes the various types, antecedents, and outcomes of commitment in established organizations (Klein *et al.*, 2012; Meyer and Herscovitch, 2001). However, none of this previous literature has examined the special challenges associated with inducing commitment in entrepreneurial settings. These challenges reflect, among other things, the informational context within which

Keywords: entrepreneurship theory; stakeholder enrollment; opportunity formation; risk; uncertainty; workplace commitment

*Correspondence to: Heidi N. Herrick, David Eccles School of Business, University of Utah, 1655 E. Campus Center Dr., Salt Lake City, UT 84112, U.S.A. E-mail: heidi.herrick@eccles.utah.edu

enrollment occurs. For example, recent research has identified two informational settings that have an important impact on the opportunity-formation process—risk (where decision makers know the possible outcomes of their choices and the probability of those outcomes) and uncertainty (where decision makers know neither the possible outcomes nor their probability) (Alvarez and Barney, 2007). It may well be the case that the process of enrolling stakeholders in entrepreneurial endeavors varies depending on whether a setting is risky or uncertain.

The purpose of this article is to examine how the process of enrolling stakeholders varies as a function of the informational setting within which an entrepreneur is operating—risky or uncertain. The theory developed here suggests that different approaches to enrollment will be more or less effective depending on whether an entrepreneur is operating under conditions of risk or uncertainty. The article also suggests that under conditions of risk, the ability of entrepreneurs to analyze and describe opportunities will have a significant impact on their ability to enroll key stakeholders, while under conditions of uncertainty, the enrollment process cannot be based on the attributes of opportunities, but instead must be based on the attributes of the entrepreneur, e.g., his/her charisma, trustworthiness, and reputation.

The article begins by examining the concept of stakeholder enrollment and then suggests that the process of enrollment—both the bases upon which entrepreneurs enroll stakeholders and the timing of the enrollment process—varies depending on the informational context within which an entrepreneur is operating. The article generates a series of testable propositions and concludes with a discussion of the implications of these propositions for a variety of issues in the field of entrepreneurship—including the theory of the entrepreneurial firm. In sum, this article addresses three important theoretical gaps in the literature: (1) the role of enrollment in acquiring certain critical resources for an entrepreneur; (2) how the enrollment process varies between conditions of risk and uncertainty; and (3) the relationship between entrepreneurial enrollment and more traditional research on organizational commitment (Klein *et al.*, 2012).

STAKEHOLDER ENROLLMENT

The concept of stakeholder enrollment is closely related to the concept of workplace commitment

(Klein *et al.*, 2012). However, where workplace commitment examines the causes and consequences of psychological bonds of individuals to various aspects of an established workplace, stakeholder enrollment focuses on these bonds in entrepreneurial settings, where workplaces may not yet exist.

Commitment to existing workplaces

An extensive literature has explored the psychological bonds or attachments that individuals form with organizations, groups, individual leaders, projects, goals, or even abstract concepts within the workplace (Klein *et al.*, 2012; Meyer and Herscovitch, 2001), as well as the antecedents (Basu and Green, 1997; Becker, 1992; Cheng, Jiang, and Riley, 2003; Ferris *et al.*, 2003; Guthrie and Hollensbe, 2004; Hollenbeck and Klein, 1987; Johnson, Chang, and Yang, 2010; Lok, Westwood, and Crawford, 2005; Silverthorne, 2004) and consequences (Hollenbeck and Klein, 1987; Klein *et al.*, 1999; Mathieu and Zajac, 1990; Meyer *et al.*, 2002; Meyer, Becker, and Vandenberghe, 2004; Rich, Lepine, and Crawford, 2010) of such bonds.

Klein *et al.* (2012), for example, identify four types of psychological bonds that individuals can form with a target in the workplace, each with different behavioral implications: acquiescence (when bonds form because individuals see few other options), instrumental (when bonds form because individuals calculate that such bonds reduce the risks associated with prior investments), commitment (when individuals choose to dedicate themselves to the success of the target), and identification (when individuals merge their identity with the identity of a target). The first two types of bonds—acquiescence and instrumental—lead to mostly in-role behaviors with minimal extra-role behaviors. The last two types of bonds—commitment and identification—are generally associated with higher levels of extra-role behaviors. In this literature, extra-role behaviors are defined as discretionary acts that go ‘above and beyond the call of duty’ when stakeholders provide resources to a target (Meyer and Herscovitch, 2001). In-role behaviors, however, refer to a series of expected actions typically contracted for in advance.

Despite the diverse theoretical and empirical literature on the psychological bonds that underpin workplace commitment, to date, this work has focused on understanding these phenomena only in the context of established workplaces (Becker, 2012). In particular, the causes and consequences of

these bonds in entrepreneurial settings have yet to be addressed. This is the case even though entrepreneurs often need access to stakeholder resources they do not control and even though extra-role behaviors associated with higher levels of commitment may be important if stakeholders are going to make their resources available to entrepreneurs under conditions of risk or uncertainty. This article focuses on these issues.

Enrollment in entrepreneurial settings

It is often the case that the same kinds of deep psychological bonds that emerge between an individual and an established workplace can also emerge between stakeholders and an entrepreneurial endeavor. When such bonds exist and when they help an entrepreneur gain access to critical resources, the stakeholder who has made these resources available is said to be *enrolled* in this entrepreneurial endeavor.

Of course, entrepreneurs can acquire many of the resources they need from actors who have not formed any deep psychological bonds with an entrepreneurial endeavor. For example, fuel for an entrepreneur's delivery van can be secured through a simple market exchange without forming such bonds. Moreover, the first two types of bonds identified by Klein *et al.* (2012)—acquiescence and instrumental bonds—do not involve deep psychological commitments and, thus, do not typically lead to important stakeholder extra-role behaviors. In this sense, those with these psychological bonds with an entrepreneurial endeavor can be thought of as only weakly enrolled.

However, there are times when all that must be done for a stakeholder to make resources available to an entrepreneurial endeavor cannot be specified *ex ante*. Sometimes, for example, stakeholders and those associated with an entrepreneurial endeavor may not know precisely which resources will be most valuable for that endeavor, when those resources need to be made available, how they might need to be modified, and so forth. In these settings, stakeholder actions to make resources available to an entrepreneurial endeavor must, by definition, involve extra-role behaviors because, in this setting, all the relevant roles and responsibilities in this exchange are yet to be fully specified.

Work on organizational commitment suggests that these extra-role behaviors are likely only when stakeholders have strong psychological bonds with

an entrepreneurial endeavor—including commitment and identity bonds (Klein *et al.*, 2012). Stakeholders with these deep psychological bonds can be thought of as being strongly enrolled in an entrepreneurial endeavor. Moreover, these deep psychological bonds, to the extent that they are valuable and rare, may also be a source of sustained competitive advantage. Because of their socially complex nature, it may be difficult for others to imitate them at a low cost (Barney, 1991).

Enrollment targets

Of the many targets of the psychological bonds to existing workplaces identified in the organizational behavior literature (Becker, 1992; Klein *et al.*, 2012; Meyer and Herscovitch, 2001; Reichers, 1985), two are particularly important in an entrepreneurial enrollment setting: the individual entrepreneur and the entrepreneurial opportunity. An individual entrepreneur is an example of a leader as the target of these psychological bonds (Klein *et al.*, 2012). In practice, an *entrepreneur* might be a single individual or a small team with whom stakeholders form psychological bonds. An entrepreneurial opportunity is an example of an abstract concept as a target of these bonds (Meyer and Herscovitch, 2001).

Alvarez and Barney (2007) define an opportunity as competitive imperfections in product or factor markets. However, when stakeholders are enrolled to an entrepreneurial endeavor, whether or not these competitive imperfections actually exist is typically not known with certainty. In this sense, the psychological bonds that emerge between stakeholders and an opportunity focus more on the potential for competitive imperfections, rather than the existence of these imperfections.

THEORY DEVELOPMENT

Prior work has identified a variety of activities that entrepreneurs can engage in to gain access to the resources they need to form and exploit opportunities. For example, Aldrich (1999) and others (Davidsson and Honig, 2003; Roberts and Sterling, 2012; Shane and Cable, 2002) show that entrepreneurs can use their direct and indirect social ties to attract employees and secure external financial investments. Also, entrepreneurs can use their business plans (Brinckmann, Grichnik, and Kapsa, 2010;

Delmar and Shane, 2003), secured intellectual property (Roberts, 1991; Shane and Stuart, 2002), external accreditations and endorsements (Drori and Honig, 2013; Zott and Huy, 2007), and their willingness to invest their own funds in a project (Carter and Van Auken, 1990; Gartner, Frid, and Alexander, 2012) to obtain the resources needed to form and exploit an opportunity. In addition, entrepreneurs can use a variety of financial incentives (Gompers and Lerner, 1999; Kaplan and Strömberg, 2003; Arcot, 2014; Kotha and George, 2012; Ravid and Spiegel, 1997) and communication strategies to gain access to these resources (Cable and Shane, 1997; Cornelissen and Clarke, 2010; Parhankangas and Ehrlich, 2014).

However, this prior work has failed to distinguish between access to resources that requires simple contracts or weak form enrollment, on the one hand, and strong form enrollment on the other hand. This work has also failed to examine the impact of the informational context of an entrepreneurial endeavor on the enrollment process.

Risk and uncertainty

The distinction between risk and uncertainty was first introduced by Knight (1921). Knight defined an informational setting as risky when those making decisions in the setting did not know, for sure, how a decision would turn out, but did know the possible outcomes associated with a decision and the probability of those different outcomes occurring. An uncertain informational setting, however, is a setting where the decision maker cannot know the possible outcomes and, thus, cannot know the probability of these outcomes occurring. In an entrepreneurial context, risk and uncertainty exist about whether or not an opportunity exists, the actions required to form and exploit that opportunity, the entrepreneurial skills required to form and exploit an opportunity, the potential for that opportunity to generate economic profits, and so forth.

Stakeholder enrollment under risk

Rarely are the outcomes of entrepreneurial endeavors known with certainty *ex ante*. Thus, in this sense, stakeholder enrollment typically takes place in conditions that are at least risky. Under conditions of risk, information about both the opportunity and the ability of the entrepreneur to exploit that opportunity

does exist, but only probabilistically. Thus, for example, under conditions of risk, the possible outcomes associated with an opportunity, and their probabilities, can be known *ex ante*, but not the level of return an endeavor will actually generate. Moreover, while stakeholders can often directly observe some things about an entrepreneur, such as his/her experience, reputation, personality, trustworthiness, charisma, and leadership style (Gupta, MacMillan, and Surie, 2004), they can know only probabilistically whether or not these attributes of the entrepreneur will enable that entrepreneur to exploit a particular opportunity.

Even though the outcomes associated with enrolling under risk can only be known probabilistically, it is nevertheless possible for stakeholders to develop psychological bonds with both opportunities and entrepreneurs in these settings. Stakeholders develop these bonds with opportunities when they develop a sense of commitment and identity with an opportunity, even if the full dimensions of that opportunity are not yet known. Stakeholders develop these bonds with entrepreneurs when they develop a commitment and identity with entrepreneurs even when their ultimate success (or failure) cannot be known with certainty. These observations lead to the first proposition.

Proposition 1: Under conditions of risk, the target of stakeholder enrollment can be the opportunity, or the entrepreneur, or both.

Later, it will be shown that Proposition 1 does not hold under conditions of uncertainty.

It follows from Proposition 1 that the enrollment process may begin with the entrepreneur as a target or with the opportunity as the target. This is because, under risk, at the time enrollment takes place, stakeholders can have some information about an opportunity or some information about an entrepreneur. These observations lead to Proposition 2:

Proposition 2: Under conditions of risk, stakeholder enrollment may begin with the opportunity as a target or with the entrepreneur as a target.

As with Proposition 1, it will be shown that Proposition 2 does not hold under conditions of uncertainty.

Stakeholder enrollment under uncertainty

Of course, not all entrepreneurial settings are risky. When neither the possible outcomes associated with

a decision nor the probability of those outcomes is known, a decision-making setting is uncertain (Knight, 1921). Stakeholder enrollment is very different under conditions of uncertainty compared to conditions of risk.

Even under conditions of uncertainty, stakeholders can still know some things about the attributes of an entrepreneur. For example, a prospective stakeholder can often directly observe an entrepreneur's experience, reputation, personality, trustworthiness, charisma, and leadership style.

However, stakeholders cannot know, even probabilistically, whether these attributes of an entrepreneur will enable him/her to exploit a particular opportunity—because the opportunity in this uncertain setting does not yet exist. In uncertain settings, Alvarez and Barney (2007) suggest that entrepreneurs engage in actions to endogenously create the opportunities they ultimately exploit. One of the challenges entrepreneurs face in this setting is that in order to act in ways that ultimately may create an opportunity to be exploited, they may need resources they themselves do not control. Thus, to act to create an opportunity, entrepreneurs need to enroll important stakeholders, and they must do this before the opportunity they will ultimately exploit is known, even probabilistically. Such opportunities are cocreated through the joint actions of entrepreneurs and enrolled stakeholders. Only after engaging in these actions does an opportunity emerge with dimensions that can be known or measured probabilistically.

It follows that to enroll stakeholders before the nature of entrepreneurial opportunities are understood, entrepreneurs must rely on attributes of themselves, as individuals, independent of the impact these attributes might ultimately have on their ability to exploit an opportunity. This can happen in at least two ways (Alvarez and Barney, 2005). First, entrepreneurs can seek to enroll stakeholders with whom they already have prior trusting relationships. Trust is important in this context because entrepreneurs are typically asking stakeholders to make specific investments in them—investments that generate the potential for opportunism on the part of entrepreneurs (Williamson, 1985). And because of uncertainty, the sources of this threat of opportunism cannot be known *ex ante* and, thus, appropriate contractual protections cannot be devised. In this setting, enrolling stakeholders who already have prior trusting relationships with an entrepreneur set

aside opportunism concerns, which can enable an entrepreneur to get access to the resources needed to create an opportunity.

Second, stakeholders may become willing to invest in an entrepreneur in this setting because of that entrepreneur's charisma (Dobrev and Barnett, 2005). There is a substantial literature in sociology and organizational behavior on the ability of dynamic and charismatic individuals to enroll others in highly uncertain enterprises (Bass and Riggio, 2005; Weber, 1949). Charismatic leaders are able to enroll stakeholders by conveying a compelling vision of how the future might be created (Alvarez and Barney, 2005). Charisma is, therefore, likely to be particularly effective under conditions of uncertainty (Weber, 1949).

These observations lead to the following proposition:

Proposition 3: Under conditions of uncertainty, the entrepreneur, and not the opportunity, is the target of stakeholder enrollment.

Note that entrepreneurs, under conditions of uncertainty, are not likely to abandon their efforts to describe the opportunities they believe they are going to exploit as a way to enroll stakeholders. However, given uncertainty, the nature and dimensions of this opportunity are likely to change dramatically as entrepreneurs create it. If stakeholder enrollment relied only on these descriptions of opportunities, then each time entrepreneurs engaged in a 'pivot' (Arteaga and Hyland, 2013), they would have to re-enroll all their key stakeholders. Some re-enrollment is probably likely whenever the espoused opportunity is changed. But with trust and charisma in place, this enrollment process is much simpler post-pivot than would be the case if enrollment were based solely on attributes of the espoused opportunity.

This logic has an important impact on the processes by which enrollment takes place. For example, because entrepreneurs cannot reliably anticipate the return potential of opportunities under conditions of uncertainty, they cannot use the opportunity as the target of enrollment. This means that, under uncertainty, enrollment in an opportunity must come after enrollment in an entrepreneur. This logic leads to the last proposition:

Proposition 4: Under conditions of uncertainty, enrollment in an entrepreneur precedes enrollment in an opportunity.

Evolution of uncertainty and risk

Of course, uncertain situations can evolve into risky situations. This can happen as entrepreneurs gain additional information about the opportunities they are seeking to exploit. Risky situations may also evolve into uncertain situations. This can happen when changes in technology, consumer tastes, or other environmental conditions generate settings where neither the possible outcomes associated with a decision nor their probability can now be known *ex ante*.

The fact that the informational conditions associated with an opportunity can change suggests that enrollment processes that enable access to resources during one time period may actually reduce the chances for success in another time period. For example, entrepreneurs who are very skilled at enrolling stakeholders under conditions of risk may find those same skills to be less effective if a risky situation becomes uncertain. The same is true for those skilled in these activities under conditions of uncertainty who find themselves under conditions of risk. Thus, the skills that can make an entrepreneur successful in enrolling stakeholders under conditions of uncertainty—including personal charisma and the ability to learn quickly and pivot—may be ineffective as the decision-making situation evolves from uncertainty to risk. This may be one reason it is not uncommon for sources of later stage funding to insist that founders—individuals with uncertainty-appropriate enrollment skills—be replaced by more professional managers—individuals with more risk-appropriate enrollment skills—as the informational context of an opportunity changes (Hellmann and Puri, 2002).

DISCUSSION

This article began by acknowledging the importance of stakeholder enrollment in the success of entrepreneurial endeavors. The article then reviewed the information conditions of risk and uncertainty under which entrepreneurs commonly operate and developed a series of propositions. These general arguments fill several important theoretical gaps in the literature and have a variety of implications for the study of entrepreneurship, for the practice of entrepreneurship, and for related academic disciplines.

Implications for entrepreneurship process research

Much entrepreneurship research focuses on the attributes of entrepreneurs (Nicolau et al., 2008) or entrepreneurial organizations (Lumpkin and Dess, 1996) and the implications of these attributes for a variety of entrepreneurial outcomes—including survival, the level of innovation, profitability, and so forth. Relatively less attention has been focused on the processes that link the attributes of entrepreneurs and entrepreneurial organizations with entrepreneurial outcomes. The process of enrollment, contingent on the informational context an entrepreneur is operating in, is largely determinative of entrepreneurial outcomes.

Enrollment under risk focuses on the attributes of the opportunity to be exploited, the valuable, rare, and costly to imitate capabilities of the entrepreneur, or both. Under conditions of risk, the process of enrollment to an opportunity may precede enrollment to an entrepreneur, or vice versa. Both these conclusions depend on information about the opportunity and/or the entrepreneur being known, probabilistically, *ex ante*.

Under conditions of uncertainty, enrollment in an entrepreneur precedes enrollment in an opportunity and builds on prior trusting relationships and the personal charisma of an entrepreneur. Thus, in this setting, stakeholders enroll—with the entrepreneur as the target—before the opportunity they will ultimately exploit is known, even probabilistically.

Of course, the enrollment process is more difficult to study than the attributes of entrepreneurs and entrepreneurial organizations, on the one hand, and entrepreneurial outcomes on the other hand. However, these processes are the underlying causal mechanisms that link inputs to outputs and, thus, their study is essential to enhancing our understanding of entrepreneurial performance, broadly defined.

Not surprisingly, the emphasis on process also implies an emphasis on the social underpinnings of entrepreneurial activities. Much of the current entrepreneurship research focuses on the implications of technological innovation. The theory developed in this article suggests that such innovation is, in fact, an outcome of an entrepreneurial process of enrolling the stakeholders needed to exploit that opportunity. In this sense, technological innovation is the effect of an entrepreneurial process, not the cause of that process nor the cause of entrepreneurial outcomes.

And the stakeholder enrollment process—especially under conditions of uncertainty—grows out of deeply social roots. Enrollment under uncertainty builds on trusting social relations and charismatic leadership. In this sense, it is the essentially social elements of relationships that make technological innovation possible, especially under conditions of uncertainty. That is, the study of entrepreneurship—especially under uncertainty—is the study of how social groups are formed, how they evolve, and, ultimately, how they perform.

Implications for the theory of the entrepreneurial firm

Discussion of the process of enrolling critical stakeholders in order to form and exploit an opportunity link the theory developed here with broader questions about the entrepreneurial theory of the firm, i.e., when entrepreneurial firms will be formed, what their size and scope will be, etc. Under conditions of risk, most extant theories of the firm—including transactions cost economics (Williamson, 1985), incomplete contract theory (Hart and Moore, 1990), and resource-based theories of the firm (Conner, 1991)—seem likely to apply. This is because under conditions of risk, enrollment in an opportunity may precede enrollment to an entrepreneur, or vice versa. This means that the enrollment process unfolds in a setting where the value of an opportunity can be known, at least probabilistically, and, thus, that many of the transactional hazards that might be associated with collaborating with an entrepreneur to exploit an opportunity can also be known *ex ante*, at least probabilistically. In this setting, decisions about whether or not to create a firm can be based on knowable threats of opportunism (consistent with transactions cost logic), knowledge about who has the most to gain from a particular transaction (consistent with incomplete contracts logic), and knowledge about who has the most valuable, rare, and costly to imitate capabilities (consistent with resource-based logic). Under risk, all this information can be known, probabilistically, *ex ante*, and appropriate decisions about firm boundaries can be made.

This is not likely to be the case under conditions of Knightian uncertainty. Under uncertainty, the value of a transaction is not known *ex ante* and, thus, potential sources of opportunism in exploiting that opportunity cannot be known *ex ante*. Under uncertainty, the thing that is not known is who has the

most to gain from an opportunity; the value, rarity, and inimitability of resources and capabilities cannot be known either. Under Knightian uncertainty, an entirely different basis for forming an entrepreneurial firm may be required.

Alvarez and Barney (2005) show that transactions cost and incomplete contracts theories of the firm can be modified to apply under conditions of Knightian uncertainty. However, the implications of these modifications for our understanding of how entrepreneurial firms arise—if they arise—have not yet been fully discussed. The arguments developed in this article parallel Alvarez and Barney (2005) in their emphasis on trusting prior relationships and entrepreneurial charisma which, taken together, may ultimately lead to the creation of a theory of the entrepreneurial firm (under uncertainty) as opposed to the theory of the entrepreneurial firm (under risk).

Implications for workplace commitment research

Although the term *enrollment* is not used, organizational behavior scholars provide insight about the psychological bonds that individuals form with various targets in the workplace. In particular, organizational behavior scholars consider different types of bonds that vary in degree of psychological involvement or emotional and cognitive association. All types of psychological bonds between an individual and a target can be weak or strong. Although the role of psychological bonds in entrepreneurial settings has yet to be studied, the theory developed in this article suggests that different approaches to enrollment will be more or less effective depending on whether the entrepreneur is operating under conditions of risk or uncertainty.

It can be difficult to facilitate the development of a particular type of bond even under conditions of risk. This challenge is exacerbated under conditions of uncertainty where neither the possible outcomes associated with a decision nor the probability of those outcomes is known. Indeed, it is this uncertainty that excludes instrumental bonds (Klein *et al.*, 2012) from consideration as *enrolled*—or at best only *weakly enrolled*—in uncertain entrepreneurial endeavors.

The entrepreneur's challenge under uncertainty, then, is to develop strong—identification or commitment (Klein *et al.*, 2012)—bonds between stakeholders and some aspect of their entrepreneurial endeavor. Moreover, this article suggests that under

uncertainty, this target must be, at least initially, the entrepreneur. This is because the entrepreneur needs stakeholders who are willing to make resources available in order to create opportunities and, thus, cannot use opportunities to enroll those stakeholders. It is through these strong bonds that stakeholders engage in extra-role behaviors crucial to an entrepreneurial endeavor.

Implications for precommitment

The arguments presented in this article also have important implications for the concept of precommitment (Sarasvathy, 2001). In her (2001) work, Sarasvathy states that precommitments from stakeholders are an important way to help entrepreneurs reduce uncertainty and establish barriers to entry. According to this view, entrepreneurs do not sell a predetermined vision or goal to stakeholders but instead allow stakeholders who choose to make precommitments to participate in the shaping of the entrepreneurial endeavor (Sarasvathy, 2008: 86–87). Thus, precommitments are a way that stakeholders can make resources available to entrepreneurs creating opportunities.

But why do these stakeholders precommit? This article develops a theory of why stakeholders may precommit to an entrepreneurial endeavor—precommitments are the result of strong psychological bonds that can emerge between stakeholders and entrepreneurial endeavors, i.e., the stakeholder enrollment process is the cause of precommitment. The theory developed here also suggests what the targets of enrollment might be (i.e., the opportunity or the entrepreneur) and how this process is likely to change under conditions of risk versus uncertainty.

There is little doubt that precommitment, as discussed by Sarasvathy (2008), is important in many entrepreneurial settings. But understanding why stakeholders might precommit, who (or what) they might precommit to, and how the process of precommitment varies in different informational settings is central to understanding the cocreation and exploitation of entrepreneurial opportunities.

Empirical implications

The propositions derived from the theory developed in this article are inherently testable. Future empirical work will need to identify conditions that are risky and conditions that are uncertain and then

examine the process by which enrollment occurs in these different settings and the outcomes of these processes. It is likely that this research will include both quantitative and qualitative dimensions—the quantitative to measure, for example, the outcomes of the enrollment process, and the qualitative to examine the process of enrollment (Alvarez, Barney, and Anderson, 2013; Alvarez, Young, and Woolley, 2015).

Implications for entrepreneurial practice

These arguments also have important implications for entrepreneurial practice. First, they suggest that there is no ‘one best way’ of doing entrepreneurship. While it is possible for enrollment in an opportunity to precede enrollment in an entrepreneur under conditions of risk, stakeholder enrollment to an entrepreneur precedes enrollment to an opportunity under conditions of uncertainty. While focusing on the attributes of the opportunity and/or entrepreneur in order to enroll stakeholders is perfectly reasonable under conditions of risk, using preexisting trusting relationships and personal charisma to enroll people under conditions of uncertainty is perfectly reasonable under conditions of uncertainty. Any prescription that fails to recognize these informational contingencies seems destined to be misleading, at least some of the time.

Of course, this article has examined just one contingency that can have an impact on the efficacy of entrepreneurial processes—risk versus uncertainty. It seems likely that many other such contingencies exist for entrepreneurs. Ultimately, the advice given to entrepreneurs and the content of the class material students read, need to be much more contextual than is often the case.

ACKNOWLEDGEMENTS

Special thanks to Howard Klein, Janice Molloy, and the University of Utah Entrepreneurship/Social Ontology Research Meeting participants for their development of this article. The authors would also like to thank Sharon Alvarez, Lyda Bigelow, William Hesterly, Karin Fladmoe-Lindquist, Russell McBride, William Schulze, Robert Wuebker, and Todd Zenger for their helpful comments. Thanks to participants at the 2014 Strategic Management Society Special Conference on Microfoundations and the 2014 Academy of Management annual meeting for their comments on earlier versions of this article.

REFERENCES

- Aldrich H. 1999. *Organizations Evolving*. SAGE Publications: Thousand Oaks, CA.
- Alvarez SA, Barney JB. 2005. How do entrepreneurs organize firms under conditions of uncertainty? *Journal of Management* **31**(5): 776–793.
- Alvarez SA, Barney JB. 2007. Discovery and creation: alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal* **1**(1/2): 11–26.
- Alvarez SA, Barney JB, Anderson P. 2013. Forming and exploiting opportunities: the implications of discovery and creation processes for entrepreneurial and organizational research. *Organization Science* **24**(1): 301–317.
- Alvarez SA, Young SL, Woolley JL. 2015. Opportunities and institutions: a co-creation story of the king crab industry. *Journal of Business Venturing* **30**(1): 95–112.
- Arcot S. 2014. Participating convertible preferred stock in venture capital exits. *Journal of Business Venturing* **29**(1): 72–87.
- Argyres N, Mayer KJ. 2007. Contract design as a firm capability: an integration of learning and transaction cost perspectives. *Academy of Management Review* **32**(4): 1060–1077.
- Arteaga R, Hyland J. 2013. *Pivot: How Top Entrepreneurs Adapt and Change Course to Find Ultimate Success*. John Wiley & Sons: Hoboken, NJ.
- Barney JB. 1991. Firm resources and competitive advantage. *Journal of Management* **17**(1): 99–120.
- Bass BM, Riggio RE (eds). 2005. *Transformational Leadership*. Lawrence Erlbaum: Mahwah, NJ.
- Basu R, Green SG. 1997. Leader-member exchange and transformational leadership: an empirical examination of innovative behaviors in leader-member dyads. *Journal of Applied Social Psychology* **27**(6): 477–499.
- Becker TE. 1992. Foci and bases of commitment: are they distinctions worth making? *Academy of Management Journal* **35**(1): 232–244.
- Becker TE. 2012. Interpersonal commitments. In *Commitment in Organizations: Accumulated Wisdom and New Directions*, Klein HJ, Becker TE, Meyer JP (eds). Routledge/Taylor & Francis: New York; 159–200.
- Brinckmann J, Grichnik D, Kapsa D. 2010. Should entrepreneurs plan or just storm the castle? A meta-analysis on contextual factors impacting the business planning-performance relationship in small firms. *Journal of Business Venturing* **25**(1): 24–40.
- Cable DM, Shane S. 1997. A prisoner's dilemma approach to entrepreneur-venture capitalist relationships. *Academy of Management Review* **22**(1): 142–176.
- Carter R, Van Auken HE. 1990. A comparison of small business and large corporations: interrelationships among position statement accounts. *Journal of Business & Entrepreneurship* **2**(1): 73–80.
- Cheng B-S, Jiang D-Y, Riley JH. 2003. Organizational commitment, supervisory commitment, and employee outcomes in the Chinese context: proximal hypothesis or global hypothesis? *Journal of Organizational Behavior* **24**(3): 313–334.
- Conner KR. 1991. A historical comparison of resource-based theory and five schools of thought within industrial organization economics: do we have a new theory of the firm? *Journal of Management* **17**(1): 121–154.
- Cooper AC, Woo CY, Dunkelberg WC. 1989. Entrepreneurship and the initial size of firms. *Journal of Business Venturing* **4**(5): 317–332.
- Cornelissen JP, Clarke JS. 2010. Imagining and rationalizing opportunities: inductive reasoning and the creation and justification of new ventures. *Academy of Management Review* **35**(4): 539–557.
- Davidsson P, Honig B. 2003. The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing* **18**(3): 301–331.
- Delmar F, Shane S. 2003. Does business planning facilitate the development of new ventures? *Strategic Management Journal* **24**(12): 1165–1185.
- Dobrev S, Barnett W. 2005. Organizational roles and transition to entrepreneurship. *Academy of Management Journal* **48**(3): 433–449.
- Drori I, Honig B. 2013. A process model of internal and external legitimacy. *Organization Studies* **34**(3): 345–376.
- Ferris GR, Blass FR, Douglas C, Kolodinsky RW, Treadway DC. 2003. Personal reputation in organizations. In *Organizational Behavior: The State of the Science* (2nd edn), Greenberg J (ed). Lawrence Erlbaum: Mahwah, NJ; 201–234.
- Freeman RE. 1984. *Strategic Management: A Stakeholder Approach*. Pitman: Boston, MA.
- Gartner WB, Frid CJ, Alexander JC. 2012. Financing the emerging firm. *Small Business Economics* **39**(3): 745–761.
- Gompers PA, Lerner J. 1999. What drives venture capital fundraising? Working paper, National Bureau of Economic Research. Available at: <http://www.nber.org/papers/w6906> (accessed 28 August 2015).
- Gupta V, MacMillan IC, Surie G. 2004. Entrepreneurial leadership: developing and measuring a cross-cultural construct. *Journal of Business Venturing* **19**(2): 241–260.
- Guthrie JP, Hollensbe EC. 2004. Group incentives and performance: a study of spontaneous goal setting, goal choice, and commitment. *Journal of Management* **30**(2): 263–284.
- Hart O, Moore J. 1990. Property rights and the nature of the firm. *Journal of Political Economy* **98**(6): 1119–1158.
- Hellmann T, Puri M. 2002. Venture capital and the professionalization of start-up firms: empirical evidence. *Journal of Finance* **57**(1): 169–197.
- Hollenbeck JR, Klein HJ. 1987. Goal commitment and the goal-setting process: problems, prospects, and proposals for future research. *Journal of Applied Psychology* **72**(2): 212–220.

- Johnson RE, Chang C-H, Yang L. 2010. Commitment and motivation at work: the relevance of employee identity and regulatory focus. *Academy of Management Review* **35**(2): 226–245.
- Kaplan SN, Strömberg P. 2003. Financial contracting theory meets the real world: an empirical analysis of venture capital contracts. *Review of Economic Studies* **70**(2): 281–315.
- Klein HJ, Molloy JC, Brinsfield CT. 2012. Reconceptualizing workplace commitment to redress a stretched construct: revisiting assumptions and removing confounds. *Academy of Management Review* **37**(1): 130–151.
- Klein HJ, Wesson MJ, Hollenbeck JR, Alge BJ. 1999. Goal commitment and the goal-setting process: conceptual clarification and empirical synthesis. *Journal of Applied Psychology* **84**(6): 885–889.
- Knight FH. 1921. *Risk, Uncertainty and Profit*. Houghton Mifflin: New York.
- Kotha R, George G. 2012. Friends, family, or fools: entrepreneur experience and its implications for equity distribution and resource mobilization. *Journal of Business Venturing* **27**(5): 525–543.
- Lok P, Westwood R, Crawford J. 2005. Perceptions of organisational subculture and their significance for organisational commitment. *Applied Psychology* **54**(4): 490–514.
- Lumpkin GT, Dess GG. 1996. Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review* **21**(1): 135–172.
- Mathieu JE, Zajac DM. 1990. A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin* **108**(2): 171–194.
- Meyer JP, Becker TE, Vandenberghe C. 2004. Employee commitment and motivation: a conceptual analysis and integrative model. *Journal of Applied Psychology* **89**(6): 991–1007.
- Meyer JP, Herscovitch L. 2001. Commitment in the workplace: toward a general model. *Human Resource Management Review* **11**(3): 299–326.
- Meyer JP, Stanley DJ, Herscovitch L, Topolnytsky L. 2002. Affective, continuance, and normative commitment to the organization: a meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior* **61**(1): 20–52.
- Nicolau N, Shane S, Cherkas L, Hunkin J, Spector TD. 2008. Is the tendency to engage in entrepreneurship genetic? *Management Science* **54**(1): 167–179.
- Parhankangas A, Ehrlich M. 2014. How entrepreneurs seduce business angels: an impression management approach. *Journal of Business Venturing* **29**(4): 543–564.
- Ravid SA, Spiegel M. 1997. Optimal financial contracts for a start-up with unlimited operating discretion. *Journal of Financial and Quantitative Analysis* **32**(03): 269–286.
- Reichers AE. 1985. A review and reconceptualization of organizational commitment. *Academy of Management Review* **10**(3): 465–476.
- Rich BL, Lepine JA, Crawford ER. 2010. Job engagement: antecedents and effects on job performance. *Academy of Management Journal* **53**(3): 617–635.
- Roberts EB. 1991. *Entrepreneurs in High Technology: Lessons from MIT and Beyond*. Oxford University Press: New York.
- Roberts PW, Sterling AD. 2012. Network progeny? Prefounding social ties and the success of new entrants. *Management Science* **58**(7): 1292–1304.
- Sarasvathy SD. 2001. Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review* **26**(2): 243–263.
- Sarasvathy SD. 2008. *Effectuation: Elements of Entrepreneurial Expertise*. Edward Elgar Publishing: Cheltenham, U.K.
- Shane S. 2000. Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science* **11**(4): 448–469.
- Shane S, Cable D. 2002. Network ties, reputation, and the financing of new ventures. *Management Science* **48**(3): 364–381.
- Shane S, Stuart TE. 2002. Organizational endowments and the performance of university start-ups. *Management Science* **48**(1): 154–170.
- Silverthorne C. 2004. The impact of organizational culture and person-organization fit on organizational commitment and job satisfaction in Taiwan. *Leadership & Organization Development Journal* **25**(7): 592–599.
- Weber M. 1949. *The Methodology of the Social Sciences*. Free Press of Glencoe: Glencoe, IL.
- Williamson OE. 1985. *The Economic Institutions of Capitalism*. Free Press: New York.
- Zott C, Huy QN. 2007. How entrepreneurs use symbolic management to acquire resources. *Administrative Science Quarterly* **52**(1): 70–105.