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Article in *Entrepreneurship: Theory and Practice* · December 2013

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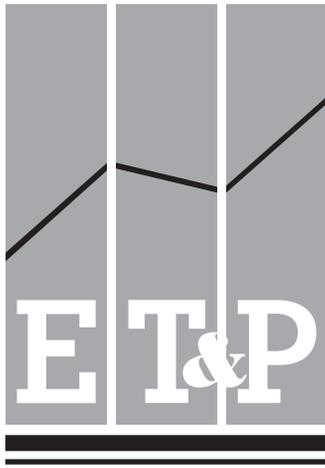
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An Effectual Approach to International Entrepreneurship: Overlaps, Challenges, and Provocative Possibilities

Saras Sarasvathy
K. Kumar
Jeffrey G. York
Suresh Bhagavatula

In this paper, we outline several interesting observations about international entrepreneurship (IE) research through the theoretical lens of effectuation. In doing so, we show how an effectual approach can help resolve four central conflicts and knowledge gaps identified in two recent comprehensive reviews of IE. We then present an illustrative case study from India that provides an intriguing comparison with the most recent modification of the Uppsala model to integrate with effectuation theory. Finally, we offer four provocative possibilities for future research at the intersection of IE and effectuation research.

Introduction

In this paper, we outline several interesting observations about international entrepreneurship (IE) research when perceived through the theoretical lens of effectuation. In this task, we were aided by extant work that has already begun ~~the task of~~ building bridges between effectuation research and IE (e.g., Mainela & Puhakka, 2009; Schweizer, Vahlne, & Johanson, 2010). In particular, we found the explicit suggestions offered in Schweizer et al. as useful springboards to both elaborate effectuation theory into IE and develop new insights for future work at the intersection of the two literature streams.

Please send correspondence to: Saras Sarasvathy, tel.: +1-434-982-2079; e-mail: SarasvathyS@darden.virginia.edu, to K. Kumar at Kumark@iimb.ernet.in, to Jeffrey G. York at jeffrey.york@colorado.edu, and to Suresh Bhagavatula at Suresh.bhagavatula@iimb.ernet.in.

Submitted for: ~~High-Potential Concepts, Phenomena, and Theories in International Entrepreneurship Research Special Issue.~~

1 We begin with a brief summary of effectuation research followed by a rather high-
2 level review of research in IE. For the latter endeavor, we used a recent spate of review
3 articles on IE (Coviello, McDougall, & Oviatt, 2011; Jones, Coviello, & Tang, 2011;
4 ² ³ Keupp & Gassmann, 2009; Zahra, 2005). Based on their review of 323 relevant journal
5 articles, Jones et al. argue that given the “multi-disciplinary and multi-theoretical nature
6 of IE,” advances in theory development in IE need to be accomplished through an
7 “iterative process of debate, discussion as well as testing,” as propounded by Weick. Jones
8 et al. also highlight some important thematic areas of research in IE that they consider as
9 “more recent and under researched” and imply that further debates and discussions can be
10 around these themes. Significantly, one such theme identified in their review is opportu-
11 nity recognition, wherein they call for the application of the logic of effectuation (Jones
12 et al., p. 648).

13 Our approach of relying on these recent reviews has allowed us to anchor our
14 observations in deeper waters than if we had attempted a literature review on our own.
15 We did, however, follow the dominant traces back from these reviews to the most cited
16 classics and seminal empirical works. Careful reading of these classics allowed us to
17 develop a more textured and nuanced understanding of the history of IE.

18 We hope to contribute to the IE conversation in three ways: first, we forge links
19 between the burgeoning body of work in effectuation and the recent stocktaking of
20 scholarship in IE; second, we identify specific topics of interest within IE that offer
21 promise for empirical work involving effectuation; third, we suggest provocative new
22 possibilities for future research at the intersection of the two fields.

23 24 **A Brief Summary and Update on Effectuation Research**

25
26 Effectuation posits a theoretical framework describing how expert entrepreneurs
27 utilize resources within their control in conjunction with commitments and constraints
28 from self-selected stakeholders to fabricate new artifacts such as ventures, products,
29 opportunities, and markets (Sarasvathy, 2001; Wiltbank, Dew, Read, & Sarasvathy, 2006).
30 ~~An expert entrepreneur is defined as someone with (1) over 10 years of full-time experi-~~
31 ~~ence founding and running (2) multiple ventures (3) including successes and failures~~
32 ~~and (4) evidence of proven positive performance such as taking a company public~~
33 ~~(Sarasvathy).~~ A variety of studies in multiple industries have shown that expert entre-
34 preneurs commonly utilize a set effectuation heuristics (Read, Song, & Smit, 2009;
35 Sarasvathy & Dew, 2005; Wiltbank, Read, Dew, & Sarasvathy, 2009). However, only
36 recently, studies have started to explore broader empirical measures of effectuation
37 (Brettel, Mauer, Engelen, & Kuepper, 2012; Chandler, DeTienne, McKelvie, & Mumford,
38 ⁴ 2011) and how it may affect firm performance (Fischer & Reuber, 2011; Read et al.).

39 Studies of expert entrepreneurs have distilled their heuristics into four effectual
40 principles: means orientation, affordable loss, building partnerships, and leveraging con-
41 tingency (~~Dew et al., 2009a~~). However, effectuation is also a dynamic process with two
42 concurrent cycles of acquiring means and constraining goals: “The first is an expanding
43 cycle that increases the resources available to the venture, and the second accretes
44 constraints on the venture that converge into specific goals over time” (~~Read et al., 2009,~~
45 ⁵ ~~p. 3; see also~~ Sarasvathy, 2008, p. 101 and Sarasvathy & Dew, 2005). In the following
46 review, we conceptualize effectuation as the sum of these principles and processes.
47 Combined, these elements show effectuation to be one type of non-predictive strategy
48 (Wiltbank et al., 2006). Stated another way, effectuation consists of heuristics that embody
49 non-predictive control as opposed to predictive control (henceforward referred to, in short,

1 as an emphasis of control over prediction). Because effectuation uses means currently
2 within the actor's control as the basis for action, it does not require predictions about the
3 future. As such, effectual heuristics are particularly useful in situations of unpredictability
4 such as those in which new ventures often are formed (Knight, 1921; Sarasvathy & Dew).

5 Since the publication of the foundational article on the topic in the *Academy of*
6 *Management Review* (Sarasvathy, 2001), effectuation has generated a great deal of interest
7 among entrepreneurship scholars (e.g., Brettel et al., 2012; Chandler et al., 2011; Chiles,
8 Gupta, & Bluedorn, 2008; Dew et al., 2009a; Endres & Woods, 2010; Goel & Karri, 2006;
9 Harmeling, 2011; Mitchell et al., 2007; Read et al., 2009; Wiltbank et al., 2009). With her
10 original study, Sarasvathy sought to identify and understand the teachable and learnable
11 elements of entrepreneurial expertise. In her sample, 63% of the experts used "effectual"
12 rather than "causal" logic for about 75% of the time (Sarasvathy, 2001) showing that
13 expert entrepreneurs tend to shy away from prediction-based strategies; rather, they often
14 (1) use a means-based approach, (2) manage their level of affordable loss, (3) forge
15 partnerships, and (4) leverage contingency (see Read et al.; Sarasvathy, 2008). Finally,
16 (5) because they use a logic of non-predictive control, expert entrepreneurs learn to see
17 the future as cocreated through human action rather than unfolding through inevitable
18 trends outside the purview of human action.

19 20 **Effectuation Principles**

21 With a view to working out its practical and pedagogical applications, the five
22 principles and the overall logic of effectuation have since been named as follows in the
23 full-length treatment of the subject in Sarasvathy (2008): (1) bird-in-hand; (2) affordable
24 loss; (3) crazy quilt; (4) lemonade; (5) pilot-in-the-plane

25
26 ***Bird-in-Hand.*** Effectuation begins with a central actor (the entrepreneur) who has
27 three categories of means: identity (who I am), knowledge (what I know), and networks
28 (whom I know). This focuses the entrepreneurial question on "What can I do?" based
29 on the means at hand rather than "What should I do?" based on a predictive analysis. The
30 means-based approach relies on identity, knowledge, and networks to generate potential
31 opportunities. While causal and effectual logic are integral parts of human reasoning,
32 empirical research has teased out the extent to which means-based logic is used. In a
33 meta-analysis of existing studies, Read et al. (2009) found a significant and positive
34 correlation between a focus on means and new venture performance. In this analysis,
35 means-based logic was measured through constructs such as resource-based capabilities
36 (who I am), the number of years of industry experience (what I know), and size and
37 breadth of networks (whom I know). By relying on means rather than ends, effectuation
38 encourages entrepreneurs to be open to new possibilities and to be finely attuned to their
39 own capabilities.

40 Recent work (Fischer & Reuber, 2011) has suggested that active engagement in social
41 interaction can trigger new cognitions regarding both the entrepreneur's means, and the
42 effects they can create with those means. Further, McKelvie, Haynie, and Gustavsson
43 (2011) found that opportunity-specific expertise moderates the effect of uncertainty and
44 action under unpredictable conditions; they propose that experts may be more likely to
45 downplay the importance of prediction and rather focus on their abilities to create new
46 markets and firms based on their expertise (what they know) (Blume & Covin, 2011).

47
48 ***Affordable Loss.*** While means are an important precursor of new firm emergence, an
49 entrepreneur's perception may not be solely based on means; their risk perception also

1 influences their decision to actually start the business (e.g., Kahneman & Lovallo, 1993).
2 The plunge decision has traditionally been modeled either as a choice between venturing
3 and the opportunity cost of a wage job (Astebro, Chen, & Thompson, 2011; Cramer,
4 Hartog, Jonker, & van Praag, 2002; Evans & Leighton, 1989; Lucas, 1978) or as a real
5 options problem (McGrath, 1999). Expert entrepreneurs utilizing effectual strategies,
6 however, have been shown to focus on what they can afford to lose (Dew et al., 2009b;
7 Sarasvathy, 2008) rather than on prediction of possible gains. By focusing on affordable
8 loss, the need to predict future returns is eliminated, thus, implying less time engaged in
9 planning. The use of the affordable loss principle in innovative research and development
10 □ (R&D) projects has been shown to lead to higher process efficiency (Brettel et al., 2012).
11 Affordable loss can be calculated relatively quickly because the entrepreneur knows what
12 she and her nearest environment have and she can estimate how much is affordable to
13 lose. Chandler et al. (2011) provide empirical support for the principle of affordable loss,
14 successfully differentiating entrepreneurial action that focuses on only risking what they
15 can afford to lose from more causal approaches, as well as other principles of effectuation.

16
17 ***Crazy Quilt.*** An effectual approach risks only resources that can be affordably lost; thus,
18 it also drives partnerships as the central method to expand resources. Rather than engag-
19 ing in extensive planning and research to identify specific stakeholders to target based on
20 preselected goals, an effectual approach calls for entrepreneurs to rapidly engage in
21 conversations with a variety of people they already know or come into contact with, some
22 of whom end up making actual commitments to the new venture. One critical distinction
23 of this process is that rather than entrepreneurs seeking to legitimize their business and
24 thus secure commitments from targeted stakeholders (Aldrich & Fiol, 1994), effectual
25 entrepreneurs seek to create avenues for stakeholder self-selection. In the effectual
26 process, stakeholders put “skin in the game” because they see opportunity in cocreating
27 the venture with the entrepreneur. Entrepreneurs may build many relationships, but only
28 those in which both parties share the risk of the venture and benefit from the success of the
29 venture constitute effectual partnerships (Chandler et al., 2011).

30
31 ***Lemonade.*** An effectual approach leverages uncertainty by treating surprises as oppor-
32 tunities to control the newly emerging situation. Since entrepreneurs often operate in
33 conditions of enhanced uncertainty, effectuation posits that they may benefit from embrac-
34 ing surprises rather than following a linear and goal-oriented process that seeks to avoid
35 deviations from the plan. Embracing new, discomfiting information allows unfruitful
36 experiments to be abandoned and emergent possibilities to be leveraged (Chandler et al.,
37 2011). This opens up the resource of serendipity, unintended discovery, as part of the
38 opportunity development process (Corner & Ho, 2010; Dew, 2009). Beyond the realm
39 of entrepreneurial ventures, Brettel et al. (2012) found support for the concept of
40 “acknowledging the unexpected” (p. 168) having a positive impact on R&D output in
41 highly innovative (uncertain) research settings. The process of turning “lemons to lem-
42 onade” by embracing contingency plays out through the effectual process, based on the
43 evolving means, goals, and stakeholders of the venture.

44
45 ***Pilot-in-the-Plane.*** While empirical research has built on Sarasvathy’s (2001) insight of
46 non-predictive control as an overarching logic embodied in the four principles discussed
47 above, Sarasvathy (2008) added the logic itself as a fifth principle that emphasizes the
48 role of human beings rather than trends in determining the shape of things to come. The
49 pilot-in-the-plane principle is an explicit rejection of inevitable trends. Faced with a
50 highly uncertain event space, effectual entrepreneurs seek to learn more about it not with

1 a view of updating their probability estimates, but rather with a view of intervening in the
2 event space itself to transform and reshape it, at least partially, with other effectual actors
3 (Sarasvathy, Menon, & Kuechle, 2010). In other words, effectual entrepreneurs do not see
4 history running on autopilot, but rather consider themselves one of many who copilot the
5 course of history.

7 **Effectual Processes**

8 While the five principles above may be observed even in static studies of effectuation,
9 to understand the effectuation framework, one must take into account its dynamics.
10 The static principles are enacted through two concurrent cycles: expanding means
11 and converging goals. Prior research has provided insights about these cycles: “The first
12 cycle (*expanding means*) increases the resources available to the venture by increasing
13 stakeholder membership in the effectual network; and the second (*converging goals*)
14 accretes constraints on the venture that converge into specific goals that get embodied in
15 an effectual artifact over time” (Sarasvathy & Dew, 2005, pp. 543–544). In other words,
16 using effectual principles, entrepreneurs will grow their means through an expanded
17 stakeholder network while simultaneously converging on goals through stakeholder
18 self-selection and executing on commitments made with them.

19 The venture starts out as an ambiguous idea at the beginning of the effectual process
20 and develops through the commitments executed by the growing network of stakeholders
21 who have a voice in shaping the goals of the venture. An important distinction regarding
22 this process is brought to light by a recent study on uncertainty avoidance and business
23 8 planning. Brinckmann, Grichnik, and Kapsa (2010) find that in cultures with higher levels
24 of uncertainty avoidance, the benefit of business planning is significantly reduced. They
25 explain this finding in terms of the effectual process; their findings suggest that business
26 planning is not in and of itself harmful, nor helpful, but the process through which
27 entrepreneurs converge on business plan goals, yet remain open to contingency, is critical
28 for performance. This distinction illustrates that the effectual process is one of expanding
29 means and converging goals, but remains open to embracing contingency.

30 In recent years, the principles of effectuation embodied in the dual cycle process have
31 begun to seep into IE in interesting ways. We next turn to that literature.

33 **A Review of International Entrepreneurship Research and** 34 **Its Implications for Effectuation**

35
36 Just in the last 5 years, several reviews and special topic forums in IE research have
37 been published (Aspelund, Madsen, & Moen, 2007; Coombs, Sadrieh, & Annavarjula,
38 2009; Coviello et al., 2011; Cumming, Sapienza, Siegel, & Wright, 2009; Di Gregorio,
39 Musteen, & Thomas, 2008; Engelen, Heinemann, & Brettel, 2009; Jones et al., 2011;
40 Keupp & Gassmann, 2009). According to Jones et al. (2011), the current consensus on
41 core topics of interest to researchers in IE includes (1) entrepreneurship crossing borders,
42 i.e., entrepreneurial internationalization, as well as (2) comparative studies of entrepre-
43 neurship across borders. This consensus embraces the definition of IE offered in Oviatt
44 and McDougall (2005, p. 540): *International entrepreneurship is the discovery, enact-*
45 *ment, evaluation, and exploitation of opportunities—across national borders—to create*
46 *future goods and services*. Similarly, in their review of 179 articles on IE published in 16
47 journals over 14 years, Keupp and Gassmann (p. 603) emphasize the need for studies in

1 IE that “are grounded in frameworks from entrepreneurship theory.” More recently, in
2 their review of 323 IE articles, Jones et al. (p. 643) point out that relatively few studies
3 on entrepreneurial internationalization have entrepreneurship as their primary theme and
4 emphasize the need to incorporate frameworks from entrepreneurial cognition combined
5 with a dynamic view of networks, knowledge, and firm-level capabilities.

6 There are at least three characteristics of conducting cross-border business that call
7 out for theories from entrepreneurship in general and effectuation in particular.¹

- 8
- 9 1. **Cross-border uncertainty.** Conducting cross-border business often injects additional
10 uncertainty into a firm’s environment, even in the case of well-established firms
11 operating in mature markets. In other words, even non-entrepreneurial firms may have
12 to become more entrepreneurial in tackling cross-border business issues.
- 13 2. **Limited resources.** Operating in contexts involving multiple risks such as political,
14 economic, sociocultural, etc. is common to international business and IE, but having
15 to do so with limited resources makes it a peculiarly entrepreneurial problem for IE
16 research.
- 17 3. **Network dynamics.** Creating, maintaining, growing, and managing networks, whether
18 at the individual, organizational, or interorganizational level, becomes more challeng-
19 ing across borders because of geographic and cultural distance, both of which make
20 communication more complex.

21

22 When we consider the specifics of IE research in terms of the “Why? When? Where?
23 How? How fast?” of the internationalization decision, we begin to see how the principles
24 of effectuation may offer useful explanatory variables for empirical work and open up new
25 avenues for theorization as well. Let us outline a few empirical possibilities first before
26 embarking on possible new theorizing.

27

28 **Cross-Border Uncertainty and Effectuation:** 29 **Bird-in-Hand and Pilot-in-the-Plane**

30 The decision to internationalize is usually modeled as a process and not a deliberate,
31 goal-oriented, strategic decision at a single point in time. The two traditional
32 approaches—the Uppsala internationalization model (Johanson & Vahlne, 2009;
33  Johanson & Wiedersheim-Paul, 1975) and the innovation model (Cavusgil, 1980)—both
34 embrace process perspectives that cohere well with effectuation models. In a comparative
35 analysis of traditional versus born-global models of internationalization, Chetty and
36  Campbell-Hunt (2004) explicated the more processual aspects of the former and a stronger
37 role for competitive strategy in the latter. Yet, even in the born-global case, effectual
38 aspects of the internationalization process are difficult to overlook. In particular, both prior
39 knowledge or experience of the entrepreneurs as well as their access to international
40 networks form key components of born-globals’ IE capabilities.

41 In general, we should expect that effectual variables such as who the founding
42 entrepreneurs are, what they know, and whom they know will be important to IE research.
43 Yet, there are virtually no studies in IE that seek to characterize entrepreneurs as a holistic
44 bundle of identity, knowledge, and networks. We are cognizant of the importance of
45 avoiding theory soups in formulating empirical studies. From a methodological stand-
46 point, it might be useful to separate these three sets of variables out and even to design
47

48

49 1. We thank an anonymous reviewer for helping us synthesize insights from IE into these three characteristics.

1 entirely disparate studies for each set. Yet, given that a number of studies have already
2 examined each individually, it might be time to begin putting the pieces together to
3 develop more coherent and comprehensive models of the active agents driving the inter-
4 nationalization process. A simple way to accomplish this could be to conduct a meta-
5 analytic review of the characteristics of entrepreneurs from extant IE research.

6 A slightly more nuanced approach would involve “effectual” modifications to existing
7 theories. IE models typically posit prior knowledge, experience, and network character-
8 istics as antecedents to the internationalization process. In other words, people with
9 certain types of prior knowledge or network structures are more or less likely to interna-
10 tionalize. Effectuation suggests an additional consideration. Not only *whether* different
11 types of identity, knowledge, and networks result in internationalization, but *which*
12 *types* of these variables lead to *how* and *how fast* firms may internationalize. The model
13 developed by Oviatt et al. (2005) offers an exemplar of such theorization. Here, the
14 dependent variable is internationalization speed. In the model, entrepreneurs’ percep-
15 tions of technology, competition, and opportunity are moderated by their knowledge and
16 networks in explaining internationalization speed.

17 An effectual lens coheres well with this model and simply adds dynamism and
18 endogeneity into the model. Specifically, technology, competition, and opportunity may
19 be modeled not only as antecedents, but also as artifacts of the entrepreneurial (or more
20 precisely in this model, the entrepreneurial internationalization) process. Not only does
21 it matter who the entrepreneurs are (bird-in-hand), but also the environment they are
22 in gets transformed due their acting on it (pilot-in-the-plane). This implies that as entre-
23 preneurs internationalize, not only their *perceptions* of technology, competition, and
24 opportunity may change, but also the actual technologies, competitive landscapes, and
25 opportunities themselves may change and be reshaped through the actions, reactions,
26 and interactions of entrepreneurs and their stakeholders (Venkataraman, Sarasvathy,
27 Dew, & Forster, 2012).

28 29 **Limited Resources and Effectuation: Affordable Loss, Lemonade and** 30 **Pilot-in-the-Plane**

31 As noted above, the bird-in-hand principle in effectuation suggests specific modi-
32 fications in current IE models and opens up new research designs. Similarly, the other
33 effectual principles also offer ways to deepen and widen current IE research. In a study of
34 212 foreign market entries by 87 new ventures, Shrader et al. (2000) showed how entre-
35 preneurs may manage the multiplicity of risks involving cross-border businesses by
36 exploiting simultaneous trade-offs between these risks. One specific example offered in
37 the study exemplifies the affordable loss principle: . . . *selling outputs in a risky country*
38 *was accompanied by employing an operating mode that committed fewer resources*
39 (Shrader et al., p. 1243). Note that this too is an example of *how* to internationalize rather
40 than *whether* to internationalize. It is also important to note that affordable loss may be
41 used both causally and effectually (Dew et al., 2009b). Therefore, ventures may make the
42 *whether* to internationalize decision in a deliberate, planned, goal-driven, causal way and
43 may still use an effectual affordable loss approach on designing the *how*. More generally,
44 it would be interesting to empirically examine how new ventures mix and match predictive
45 (causal) and non-predictive (effectual) approaches, with a view to building contingency
46 models (as opposed to linear and static models) in IE.

47 Why some firms as opposed to others are able to internationalize early and rapidly is
48 an interesting empirical puzzle in the IE literature. In seeking to explain this, scholars run
49 into conflicting predictions from theories based on resource-based view (RBV) (Hitt,

1 Hoskisson, & Kim, 1997) as opposed to theories based on dynamic capabilities (Katila &
2 Shane, 2005). The former argues for the necessity of specialized resources, while the latter
3 counters such necessity and shows that capabilities may be developed under conditions
4 of resource scarcity. As Sapienza, Autio, George, and Zahra (2006) argue, whereas
5 additional resources may be necessary and even offer advantages in some cases, certain
6 attributes of existing resources, such as fungibility, may allow them to be put to alternate
7 uses, thereby allowing firms to internationalize without having to garner large additional
8 endowments of resources.

9 Effectual entrepreneurs view and treat *all* resources as fungible. They see fungibility
10 not as an attribute of resources but as the *de facto* side effect of a lemonade strategy of
11 exaptation in the face of unexpected contingencies; for these entrepreneurs, attributes
12 arising due to adaptation within particular environments at particular points of time may
13 then be exapted to other environments at a future date (Dew, Sarasvathy, & Venkataraman,
14 2004). Exaptation is a strategy found in biological evolution (Gould & Vrba, 1982) and
15 in the history of new technologies and new products (Mowery, 1992). So an effectual
16 approach, by taking an active and agentic stance toward resources—i.e., what people *do*
17 with resources matters more than the attributes of resources themselves—resolves the
18 theoretical conflict between the quantity versus the quality (fungibility) of resources being
19 necessary conditions for early and rapid internationalization (Prashantham & Dhanaraj,
20 2010; Yli-Renko, Autio, & Tontti, 2002).

21 When viewed through an effectual lens, particularly in terms of the pilot-in-the-plane
22 principle, the problem at hand becomes one of leveraging existing resources, whether
23 large or small, specific or fungible. Effectuation acknowledges and assumes variations in
24 starting points. This heterogeneity in starting points implies that different entrepreneurs
25 can take up completely different actions and interactions using the same exact effectual
26 process. Add to that the fact that the unexpected is figured into the effectual process, and
27 it is easier to see how the principles may be widely generalized across phenomena that
28 involve seemingly intractable variations both at the starting and end points in the process
29 (Autio, George, & Alexy, 2011; Prashantham & Floyd, 2012).

31 **Network Dynamics and Effectuation: Crazy Quilt**

32 Yet another way to incorporate effectuation into extant IE research could be to dive
33 deeper into the role of networks and social capital in the internationalization process. IE
34 researchers are increasingly paying empirical attention to entrepreneurs' social capital
35 and social networks (Chen & Chen, 1998; Coviello & Munro, 1997; Ellis & Pecotich,
36 2001; Harris & Wheeler, 2005; Qiu, 2005; Rutashobya & Jaensson, 2004; Sharma &
37 Blomstermo, 2003). In a recent study of 665 international ventures founded by entre-
38 preneurs in four Chinese cities, Ellis (2011) demonstrated the idiosyncratic nature of
39 social ties as drivers of internationalization and both their value and inhibiting effects in
40 fostering success down the road.

41 Although these studies provide ample evidence for the “whom you know” component
42 of the bird-in-hand principle, they overlook the crucial emphasis that effectuation urges
43 with regard to networks, namely, their dynamics rather than statics such as structure and
44 composition. Lately, this oversight is beginning to be remedied. In a fascinating study of
45 network dynamics in IE, Coviello (2006) showed for IE what effectuation argues for
46 resources in general, namely that it is not networks themselves that matter. Rather, it is
47 what entrepreneurs *do* with those networks. In this sense, the findings from Coviello
48 directly imply an effectual model of network dynamics in IE.

1 In other words, we agree with Sarasvathy (2001) who points out that, in general, the
2 literature describes and understands business ventures as causation processes that
3 every now and then result in an increasing involvement in international operations,
4 that is, internationalization (Welch & Luostarinen, 1988). In contrast, we concur with
5 21 Sarasvathy and Dew (2002) that entrepreneurs attempt to exercise control over what
6 can be done with available resources (effectuation rationality) rather than decide
7 what ought to be done given a set of predictions about what happens next (predictive
8 rational view). Such a view of rationality corresponds better with the often unintentional
9 internationalization of a company as the result of managerial or entrepreneurial
10 efforts . . . (Schweizer et al., 2010, p. 368)

11
12 As Schweizer et al. (2010) point out, this could mean that early and rapid international-
13 ization may not even be an interesting dependent variable to pursue in our studies (we
14 referred to this in the previous section as the *whether* to internationalize decision). The
15 more important lessons may be embedded in a more generalized processual view (*how*
16 to internationalize). The latter involves dependent variables such as trust, commitment,
17 cooperative, and contingent contractual terms, and conflict resolution.

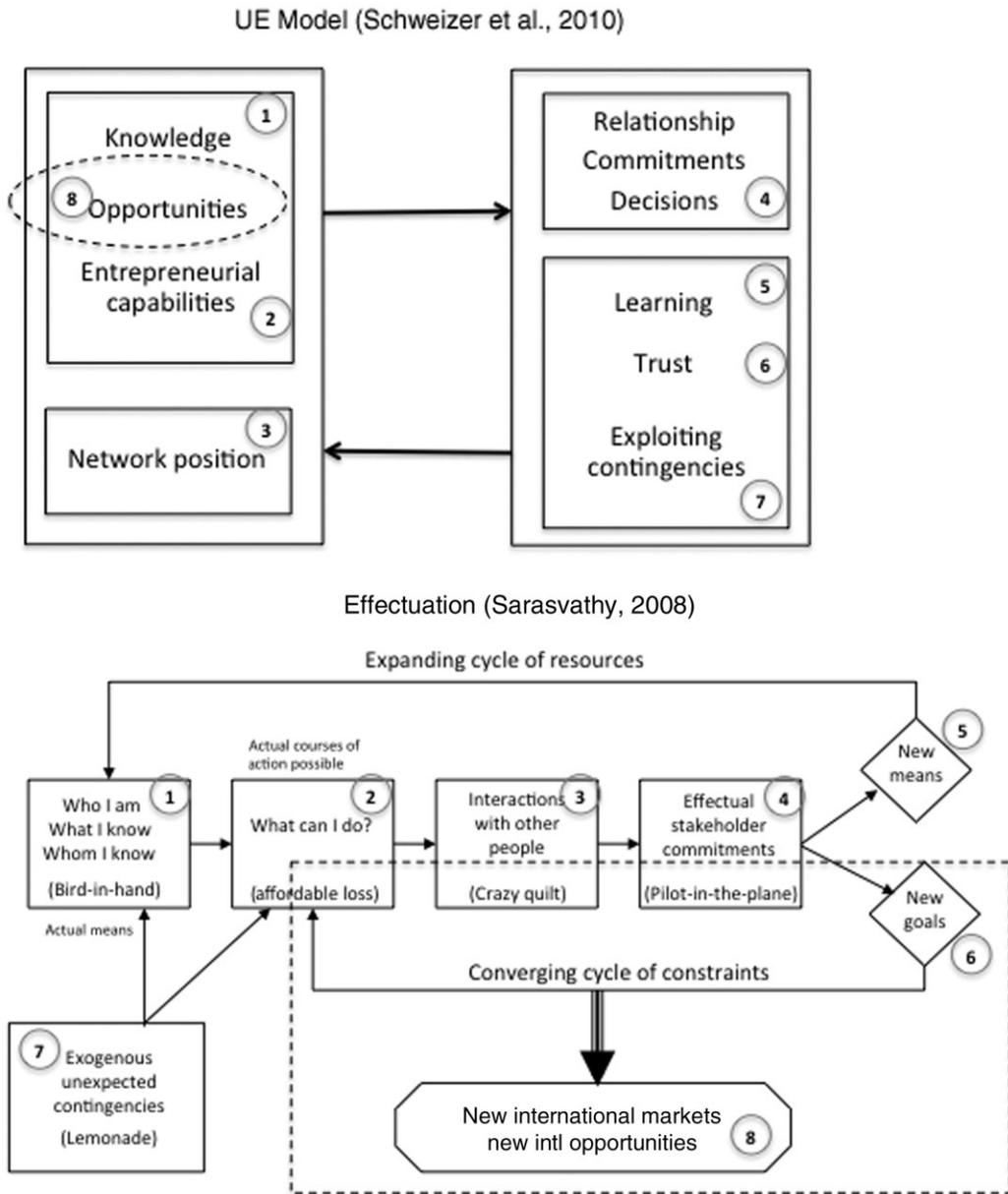
18 With a view to fleshing out our observation that the UE model does substantially
19 incorporate theorizing from the effectuation literature, we decided to graphically compare
20 figure 2 in Schweizer et al. (2010) with a more comprehensive diagram of the effectual
21 cycle from Sarasvathy (2008). The UE model consists of two sets of two boxes (one
22 containing state variables and the other containing change variables) connected by two
23 arrows going in opposite directions suggesting iteration and dynamism. The effectuation
24 model consists in five boxes connected by arrows in one direction suggesting a step-by-
25 step process (periodically impacted by the unexpected), and two diamonds signifying
26 branching points that connect back to the step-by-step process in two cycles, one expand-
27 ing and another converging—and finally a box at the bottom containing the outcome of
28 the process.

29 As you can see from the numbering of the boxes and arrows in Figure 1, almost all the
30 elements of the effectual cycle are incorporated into the UE model except for two major
31 differences. First, the effectual process involves several cycles of interactions between
32 stakeholders. Second, opportunities are not taken as given or exogenous to the process
33 in effectuation. For ease of perception, we have marked opportunities with a dotted
34 oval in the UE model and also cordoned off the outcome component of the effectual
35 process with a dotted rectangle. Taken together, the two mismatched pieces emphasize the
36 impact that stakeholder self-selection in the effectual process has on the formulation of
37 new ends. These new ends then constrain and enable future courses of action available for
38 the new venture and its internationalization process. We believe that using a state-variable
39 or change-variable framework precludes a non-teleological depiction of the process. Put
40 more simply, when we view the world through the lens of state or change variables, we
41 eliminate room in the model for purpose (i.e., teleology) and how that evolves and changes
42 over time.

43 In the effectuation model, opportunities may be endogenous outcomes of the process
44 and not merely an antecedent variable objectively related to other variables as in the
45 UE model. Hence, we marked them off with a dotted oval in the UE model depicted
46 in Figure 1. In spite of these rather interesting and perhaps inadvertent differences, the
47 two models do cohere with an overall worldview based less on prediction and more on
48 relationships and networks—whether extant, emergent, or actively shaped. Below, we
49 provide an illustrative case study of how an effectual version of the UE model depicted in
50 Figure 1 may cohere with empirical reality.

Figure 1

Comparing the UE Model with Effectuation (Differences or Omissions within Dotted Lines)



Empirical Illustration of the UE Model

In this section, we present a single case study from India that offers a slew of promising empirical applications for either the UE model or effectuation or both. We chose this case study because on the one hand, it provides a stark contextual contrast to the Abigo case in Schweizer et al. (2010) in terms of internationalization. On the other hand, it illustrates very well how the UE and effectuation models can be generalized not only into emerging economies, but also to very traditional, as opposed to high-tech, products within rather conservative family businesses, and to product markets that involve cultural components that at first blush seem to offer major hindrances to internationalizing.

Additionally, the case study contributes to a sub-stream of IE focused on emerging economies. In a recent review of 88 published papers in this sub-stream, Kiss, Danis, and Cavusgil (2012, p. 278) find that while this literature is more theoretically informed than the broader IE literature (71% of the studies focused on emerging economies are theory-based as opposed to approximately 50% in IE), it still draws from a rather narrow sliver of possible theories. Note that the review does include one study built on effectuation (Mainela & Puhakka, 2009), but we hope our own efforts in the ensuing empirical work will serve as yet another contribution to this sub-stream as well as to scholarship more broadly in IE.

Sarathy Perfumery Works (SPW): A Case Study of Internationalization from India

SPW is a third-generation family firm located in Bangalore, India. SPW manufactures *agarbatti*—incense sticks traditionally used in Hindu homes for religious purposes. Dating back to 1500–1000 BCE, the Vedic texts mention the use of incense sticks during Hindu religious ceremonies. Traditional fragrances include florals such as rose and jasmine and other specialties native to India including sandalwood and camphor. In recent years, due to internationalization, SPW has pioneered international or “foreign” fragrances such as frankincense and myrrh, chocolate, vanilla, and lavender. Packaging also has changed with the need to offer pouches to be hung from hooks on supermarket shelves as opposed to the card-boxes, in which incense sticks are usually sold on bazaar carts in Indian street markets and corner stores.

The company was started in 1945 when the young son of a farmer quit school in seventh grade and hitchhiked to the city of Bangalore in search of a way to make a living. He hoped to start a business and met someone who taught him how to make and sell *sambrani*—a form of benzoin resin that was and still is used to scent and treat hair and prevent infections. After bathing, for example, babies are exposed to the *sambrani* smoke that helps dry their hair quickly, thereby avoiding colds or pneumonia-like ailments that might result from wet hair.

According to the founder’s grandson, “He started making sambrani with someone he found here, who taught him how to do it and then he progressed a little bit further and he started selling that and eventually brought the family here. After that he discovered a way to make Agarbatti . . . it was completely a new field for him.” It took over a decade to begin sourcing natural ingredients from all over India, creating a firm called SPW and a brand called Tulasi that consisted mostly of traditional Indian incense sticks. But as the firm grew, it also began sourcing synthetic ingredients from Bombay. In the 1960s, one of the suppliers introduced a Sindhi (a community from Northern India) family living in Nigeria who wanted to import incense sticks mostly for their own use and for the small community in which they lived. SPW was happy to supply the intermediary in Bombay who ended up

1 exporting SPW's products to Nigeria. It turned out, however, that other people in Nigeria,
2 even non-Hindus, became interested in using the sticks as room fresheners. So a small but
3 growing demand for exports began.

4 Around that time, the founder's son joined the business and found exports to other
5 countries particularly fascinating. Over the next 20 to 25 years, SPW began to export
6 to several countries including Nigeria, Australia, Italy, Ethiopia, Singapore, Malaysia,
7 Dubai, and Mauritius. As his son, the third-generation owner of SPW put it during our
8 in-depth interview with him:

9 We had a good domestic market—very big in Andhra (southeastern state in India), in
10 Maharashtra (west-central state) we were doing very well. So he felt that the challenge
11 lay in exports. So my father needed a challenge—it was really challenging because
12 there was no internet, very difficult to find customers. You literally had to fly there and
13 then go to the market and find vendors and then find who the importer is and it was
14 a long-term process. So he found that more challenging.

15 When asked about how the firm chose which market to enter next and which entry mode,
16 the answer was tied to the “who I am” box in the effectuation model rather than any
17 particular strategic intent (whether fueled by threat or opportunity) for the firm. In the
18 words of the grandson describing the development of the firm under the second
19 generation—namely, his father:

20 His character was to try something different. So if he has been to Europe once then he
21 goes to Australia next time and then somewhere else. So it's the spirit of adventure
22 somewhat apart from just how much money you are making. So that's how he is. He
23 likes to try things and he likes to explore new markets. Even today I think he is
24 more adventurous than me. New idea, new product—where I am more worried about
25 producing the goods and supplying what we have but he is more concerned
26 about something new and re-inventing ourselves every time . . .

27 While the first generation was effectual because of circumstances, it appears that the
28 second generation was effectual due to lessons learned from the previous generation
29 combined with the preferences of the decision maker in conjunction with relational issues
30 arising from a growing network of stakeholders around the world. The third generation,
31 however, began to focus on more causal management and supply chain issues that
32 nevertheless have allowed the supply side of the business to internationalize in interesting
33 ways. For example, the firm now sources its sticks from Vietnam and does market
34 research in the United States to develop a line of organic products. It is relevant to
35 reiterate here that while effectual approaches open up and create new markets at low costs
36 of failure, causal approaches can help stabilize and establish leadership in those new
37 markets. Both are needed in sustaining the growth and survival of established enterprises;
38 expert entrepreneurs who choose to build large ventures, as opposed to building a port-
39 folio of smaller ones, have to become good at using both causal and effectual toolboxes
40 and more importantly, to know when and how to use which and also to mix and match
41 as needed.

42 Returning for our purposes here to the second generation of SPW's use of an effectual
43 approach, we find considerable evidence for all five principles of effectuation steeped
44 in the logic of non-predictive control. As we can see in the story narrated thus far,
45 the second-generation entrepreneur began with who he was, what he knew, and whom he
46 knew to take action on things within his affordable loss levels and stitched together a
47 growing network of stakeholders in several different countries. He also exploited contin-
48 gencies along the way to cocreate and proactively shape the future. For example, when the

1 government of India announced a duty-free, income tax-free, sales tax-free scheme called
2 export-oriented unit (EOU) for firms that were 100% export oriented, he quickly moved
3 to set up the very first EOU to sell incense sticks. This was not at all an easy task. As the
4 son of the entrepreneur explained:

5 In fact the Government of India did not have norms for agarbatti. Initially they refused
6 to give us EOU status because the business was too small and my father had to fight
7 it out with them for more than a year saying that “The Act does not specify what
8 should the size of the business be. So people-in-charge cannot really dictate how big
9 the business should be because that’s not the intention of the Act.”

10 This effectual entrepreneur did not take the environment as given. Instead, he worked to
11 transform and reshape it. This was also evidenced in his initiating and leading lobbying
12 activities for the industry as a whole, without being paranoid about competition. In fact,
13 he appeared to welcome and even help train his competition, a surprising attitude that
14 was also evidenced in the think aloud protocols of the original expert entrepreneur study
15 from which the theory of effectuation was first developed (Sarasvathy, 2008). In the words
16 of the son in response to a specific question about whether his father worried about
17 competition:

18 No. He didn’t care about those things. When he wants to do something he does it and
19 he takes things as they come. He doesn’t worry too much about planning before
20 actually visiting the place. So he will take up a challenge as it comes and then
21 overcome it and then move forward.

22 In sum, there are intriguing parallels between Abigo (Schweizer et al., 2010) and SPW—
23 the latter case being about the second generation of a very traditional family business
24 making a culture-specific product that has been exapted into multiple purposes in multiple
25 countries with different cultural tropes and the former a typical modern technological
26 venture in a developed country making a universal product in human health. Both cases
27 provide ample evidence in support of the UE model as well as for the principles of
28 effectuation. More importantly, both emphasize the centrality of *relational* as opposed
29 to solely economic motivations, strategies, and modes of entry, development, and
30 performance.

31 Although a more detailed and formal comparative analysis of the two case studies is
32 outside the scope of this largely theoretical essay, we hope to have offered sufficient
33 promise here for future researchers to delve deeper and collect more rigorous data to flesh
34 out and clarify both the UE model ~~as well as the~~ more general effectuation model as they
35 apply to IE.

37 **Provocative Theoretical Challenges for the Future**

38
39 We began this paper by building on recent reviews of IE research to connect key
40 findings to effectuation research. In particular, we found that effectuation research has
41 important implications not for the *whether to internationalize* question. Rather, different
42 principles of effectuation may be useful in developing a deeper understanding of the *how*
43 *to internationalize* question including *why, when, where, and how fast*. Our review of
44 the IE literature also led us to the UE model that has already taken a leading stride in
45 accomplishing the task of relating effectuation to IE. Thereafter we offered an illustrative
46 case study from India that both paralleled and contrasted with the Abigo case study from
47 Sweden that had previously illustrated the UE model. The case showed how both the

1 UE model and effectuation could be empirically evidenced in an emerging economy.
2 Furthermore, we outlined how the two overlapping theories may be generalizable to more
3 traditional industries and family businesses. In either case, the focus was on how firms
4 internationalize rather than on whether they do or ought to.

5 We would now like to take up the task of building on effectuation research to move the
6 theoretical frontier of IE research into new terrain. We speculate on four possibilities as a
7 way to kick-start an exciting conversation:

- 8
- 9 1. In terms of generalizability: toward social ventures and innovative organizational
10 forms
- 11 2. In terms of method: toward counterfactual analyses
- 12 3. In terms of unit of analysis: toward the intersubjective
- 13 4. In terms of scope: toward transnational and post-national ventures
- 14

15 **In Terms of Generalizability: Toward Social Ventures and Innovative** 16 **Organizational Forms**

17 A phenomenon of rising interest and excitement in entrepreneurship research has to
18 do with social ventures—namely, ventures that look beyond profit motives and explicitly
19 embrace additional objectives such as environmental sustainability, responsibilities
20 toward the community, and/or aspirations to tackle large societal problems. As many
21 social ventures take place across international borders (Dacin, Dacin, & Matear, 2010) and
22 in developing economies (Kistruck, Webb, Sutter, & Ireland, 2011) this emerging litera-
23 ture has much to learn from IE. An effectual approach, including the UE model, could
24 help to build this bridge, but focusing on the role of identity, relationships, and networks
25 in creating international social ventures. Zahra, Gedajlovic, Neubaum, and Shulman
26 (2009) provide a review of social entrepreneurship and offer a typology for future
27 research. Scholars are not only beginning to apply existing theoretical frameworks such as
28 institutional theory (Mair & Marti, 2006), corporate demography (York & Lenox, Forth-
29 coming), market and government failure (Santos, 2012), and even effectuation (Corner &
30 Ho, 2010) to social entrepreneurship, they are also beginning to collect rigorous data
31 sets and moving toward higher sophistication in method and analyses (Short, Moss, &
32 Lumpkin, 2009).

33 It would be interesting to consider choice of organizational forms, such as social
34 ventures, and innovations in organizational forms more explicitly in IE, whether as
35 dependent or independent variables in theoretical models. The role of the 100% EOU
36 created by the Indian government and fought for by the owner–entrepreneur of SPW
37 in our case study earlier is a case in point. Governments around the world are either
38 proactively introducing or reluctantly having to deal with innovations in organiza-
39 tional forms. Entrepreneurs may be caught unaware by regulatory fabrications of new
40 organizational forms or have to fight to obtain regulatory approval for the innova-
41 tions in organizational forms they themselves have fashioned (as in the case of
42 Grameen Bank—where a coup followed by direct action by the government enabled
43 the creation of a new kind of bank). Yet we do not find much discussion of this in the
44 IE literature.

45 We believe that taking explicit account of innovations in organizational forms
46 will allow IE theories to become more generalizable across disciplines and also open
47 up new methodological toolboxes for use in future research. We suggest one such
48 method next.

In Terms of Method: Toward Counterfactual Analyses

In addition to the methods used so far in IE as well as those suggested by the recent reviews of IE literature cited at the beginning of this article, we would like to offer a method used in effectuation research that may be particularly useful in IE research. In a recent article published in this journal, Harmeling and Sarasvathy (2011) used the method to develop a new theoretical framework to study entrepreneurial responses to contingency. The data for the study consisted of rich qualitative material on two cases of academic entrepreneurs, one in the United States and the other in Croatia. But counterfactual analysis can also be used with quantitative and historical data (Tetlock & Lebow, 2001) as well as experimental data (Smith, 2003).

Counterfactual analysis involves creating counterfactual cases (quantitative or qualitative) that lay out what could have happened but did not actually happen, and comparing those with what actually happened. The objective of counterfactual cases is less to describe what actually happened and more to use disciplined imagination to induce and clarify theoretically interesting dimensions of what actually happened. In other words, what happened is not used to test and support or refute theory. Instead, a theoretical framework is imposed on what happened to flesh out and make more precise the different dimensions and nuances of the framework.

In the Harmeling and Sarasvathy (2011) study for example, the factual case studies chronicle the histories of two academic entrepreneurs, Steve Mariotti and Slavica Singer who built entrepreneurship education programs, the former in the United States and the latter in Croatia. Each entrepreneur experienced contingencies that triggered their entrepreneurial journeys. The contingencies they experienced could have happened, and do indeed happen, to other people as well. Yet the particular response they chose to tackle contingencies led them to build the education programs they did. But in both cases, the types of responses they chose were not usual or obvious. Individuals who experience similar contingencies do not usually end up building educational programs, and definitely not education programs in entrepreneurship. That is why a counterfactual method was particularly appropriate to analyze these responses. When relevant theory drawn from two economic historians, Gerschenkron and Baumol, were imposed on the factual cases, three additional possible responses were uncovered and a new theoretical framework for studying and explaining the role of contingency in entrepreneurship emerged.

Interestingly, the above study can directly be seen as a study in IE as well as in entrepreneurship because both organizations have rapidly grown to operate in multiple countries (10 in the case of Mariotti, and programs reaching to all Eastern and even some Western European countries in the case of Singer). In IE, we can further apply the counterfactual method to a variety of other case histories such as those of Abigo, and SPW alluded to in this paper by juxtaposing contrasting yet related theoretical frameworks such as RBV and dynamic capabilities. The question now is not which of these two theories fit the data better, but which other courses of action that the two conflicting theories prescribe were *not* in evidence. And what difference would it make if other courses of actions or events had actually occurred.

Counterfactual analysis could be especially useful when studying interactions between human beings and their environments: whether physical, interpersonal, organizational, social, macroeconomic, cultural, or regulatory. In his dense yet powerful Nobel lecture, Vernon Smith repeatedly calls for counterfactual designs in the laboratory to better clarify the links between micro-behavior and macro-outcomes, and vice versa: *Again, studying what is not helps us to understand what is* (Smith, 2003, p. 486). This swapping of figure and ground in the way we observe and analyze reality is not only useful as a method; it also suggests a way to tackle a new unit of analysis in IE.

In Terms of Unit of Analysis: Toward the Intersubjective

28 In a recent article in AMR, Venkataraman et al. (2012) discussed the importance of the intersubjective as a unit of analysis for entrepreneurship research. Given the movement in IE toward incorporating more entrepreneurship theories within IB frameworks, it would be interesting to examine the role of the intersubjective in IE. The notion of the intersubjective differs from the dyad in networks. Instead of being an interaction between two monadic individuals embedded in a larger social network, “intersubjective” refers to the taken-for-granted epistemic basis for all knowledge modeled as an inseparable tripod of subjective–intersubjective–objective. This idea was worked out in excruciating detail by the philosopher Davidson (2001) and explained with relevance to entrepreneurship in Venkataraman et al. In a nutshell, Davidson’s exposition of the intersubjective suggests a move away from cultural differences and toward the shared meaning emerging from common human experience. Put simply, human trumps culture when the focus is on the intersubjective.

Just as an effectual perspective approaches all resources as fungible given the inherent creativity of action and interaction (Joas, 1996), the intersubjective approaches all human experience as transferable, translatable, and transformable across individuals and environments, given the constitution of knowledge (Davidson, 2001). This suggests that there may be more room for internationalization than we assume in our models. And it raises the provocative possibility that *internationalization* could be the “norm,” while *being confined within national boundaries* the “phenomenon” to be explained. At first glance, this may seem a rather trivial inversion, especially to the extent that we tend to model internationalization as a 0–1 variable. But when we consider the influence of the internet, social media, and mobile devices, most of humanity lives within a global epistemic net that is hard to escape.

The point here is not to diminish the role of culture or national borders or diversity, but to bring into relief the fact that these differences lie enmeshed in shared human experience that enmeshes the globe. When Starbucks opened its first shop in Istanbul, it went to some length to develop and offer Turkish coffee on its menu. Business pundits predicted dim prospects for the endeavor because the Turkish were too proud to let their coffee culture be adulterated with a crass commercial experience fabricated in America. Yet, as Howard Schultz explained in a television interview, the day the shop opened, there was a line around the block. And when the people waiting patiently in line came up to the counter, what they wanted most was a frappuccino. Sometimes a focus on cultural differences in the foreground hides the vast intersubjective tapestry in the background. Ignoring that has real impact in practice. It might behoove us to examine whether it has real impact in our scholarship. We next provide one outlier example that might support the need for such a self-reexamination in the field.

In Terms of Scope: Toward Transnational and Post-National Ventures

Bluseed is a project to station a ship 12 nautical miles from the coast of San Francisco, in international waters. The location will allow startup entrepreneurs from anywhere in the world to start or grow their company near Silicon Valley, without the need for a US work visa. The ship will be converted into a co-working and co-living space, and will have high-speed Internet access and daily transportation to the mainland via ferryboat. So far, over 1000 entrepreneurs from 60+ countries expressed interest in living on the ship. The project is backed by PayPal founder and Facebook early investor Peter Thiel. (Source: Bluseed’s website)

1 In empirical science, it is usual to ignore the outlier. And Blueseed is clearly not the norm
2 in IE. But sometimes the outlier can be the key to breakthroughs such as in the case of the
3 kinky orbit of Mars that forced Kepler to throw away his beautiful model of circular orbits
4 and discover the laws of planetary motion based on elliptical orbits. Or the case of the
5 anomalies Darwin observed on his visit to the Galapagos islands that led to the *Origin*
6 *of Species*. Blueseed is a gross anomaly and that is precisely why it is important for IE
7 researchers not to ignore it or other enterprises like it. Blueseed seeks to subvert the very
8 notion of “nation” and seeks to invent a transnational and even post-national future for
9 economic enterprise. A long view of history argues that if nations could be invented, they
10 could also be made obsolete. The relevant question for IE researchers is not only whether
11 that would obsolete IE, but also how such an obsolescence could actually emerge from
12 the current international conditions for commerce and enterprise. Which current theories
13 and models predict the feasibility of such a transmutation? Which point to pathways and
14 which to obstacles? And which assumptions within existing models would such a possi-
15 bility challenge the most?

16 In a recent summary of effectuation research titled “Worldmaking,” Sarasvathy (2012)
17 spelled out the need to proactively *choose between* Type I-Type II errors as an essential
18 ingredient of worldmaking explicated by philosophers such as Nelson Goodman. Under
19 Knightian uncertainty, actors seeking to build new worlds are always prone to either
20 Type-I error (rejecting a vision of a new world that later turns out to become real) or
21 Type-II error (accepting a vision of a new world that later turns out not to come to be).
22 They can therefore either seek to avoid these errors (a causal approach) or embrace them
23 by biasing their choices toward one error and away from the other (an effectual approach).
24 This philosophical generalization of the logic of effectuation argues for tackling in IE
25 research not only extant empirically real phenomena, but also imagined possibilities
26 such as the one expounded by the renowned sociologist Saskia Sassen, author of “Global
27 City (2001)”:

28 Pivotal in my research is that the global—whether an institution, a process, a dis-
29 cursive practice, or an imaginary concept—both transcends the exclusive framing of
30 national states, and also partly emerges and operates within that framing. Seen this
31 way, globalization is more than its common representation as growing interdepend-
32 ence and formation of self-evidently global institutions. It also includes sub-national
33 spaces, processes, and actors.

34 Part of her thesis urges the importance of looking for globalization within cities rather
35 than “out there” somewhere across the ocean. She argues for a subversive rather than a
36 revolutionary path toward a post-national future. Another intriguing thesis comes from
37 sociologist Jacobson (1996) who studies transnational migration and the decline of citi-
38 zenship as a result of an emphasis on human rights, even for noncitizens. These ideas
39 about the post-national within national borders or the trumping of human rights over
40 citizenship are not speculative fantasies to be left to science fiction writers. Seeming aliens
41 from the future such as Blueseed are already here and can be uncovered and studied using
42 the same techniques we use to study more mundane phenomena.

43 44 **Conclusion**

45
46 We believe that bringing together frameworks from effectuation and IE highlights
47 intriguing new possibilities for future research. Whether these involve new methods, or
48 new organizational forms, or a new unit of analysis, we need invest no more than we have

1 to lose to push forward the current frontiers. Even taking outliers like Blueseed seriously
2 and putting them within our analytical scope will allow us to sail out into uncharted waters
3 and discover exotic new territories that will ultimately help us understand the present and
4 the “normal” in deeper ways. This meeting of IE and effectuation research is a toast to that
5 exploration. Bon voyage!

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51 Saras Sarasvathy is Isadore Horween Research Associate Professor of Business Administration; Darden
52 School of Business, University of Virginia, Charlottesville, VA 22906-6500, USA; and Jamuna Raghavan
53 Chair Professor in Entrepreneurship, Indian Institute of Management, Bangalore, Bannerghatta Road,
54 Bangalore, India.

1 K. Kumar is a Professor of Entrepreneurship, Indian Institute of Management Bangalore, Bannerghatta Road,
2 Bangalore, India.

3
4 Jeffrey G. York is an Assistant Professor of Management and Entrepreneurship, University of Colorado,
5 Boulder, CO, USA.

6
7 Suresh Bhagavatula is an Assistant Professor of Entrepreneurship, Indian Institute of Management Bangalore,
8 Bannerghatta Road, Bangalore, India.

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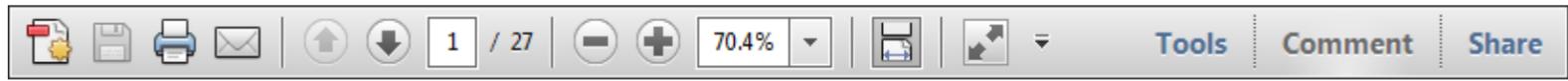
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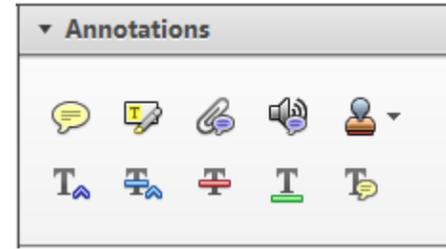
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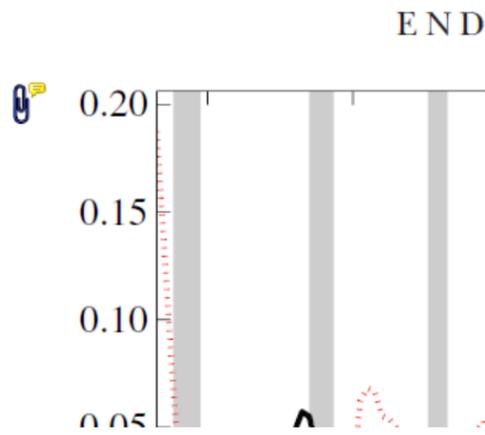
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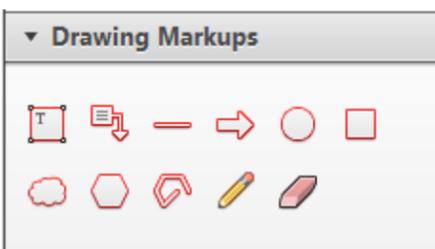


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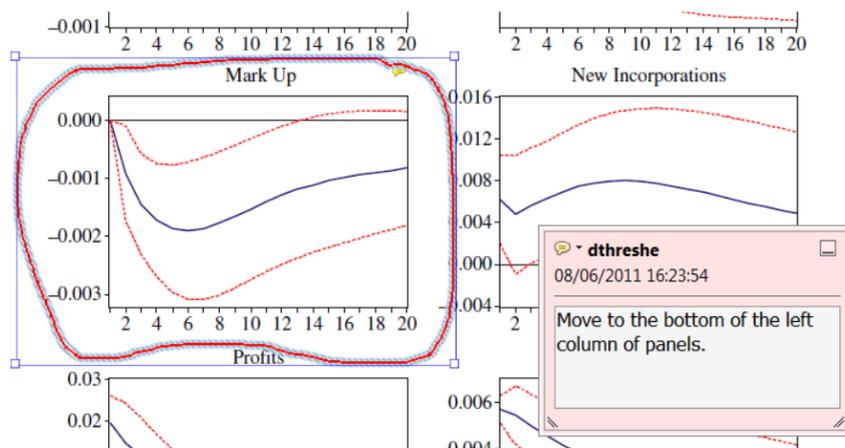


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