

ENTREPRENEURIAL SENSEMAKING:
BUILDING NOVEL BUSINESSES IN NEW MARKET SPACE

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ENTREPRENEURIAL SENSEMAKING:
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The research question that motivates this dissertation is: How do firms build new-to-the-world kinds of businesses that serve markets that do not yet exist? To answer it, I begin by drawing on theories of inductive entrepreneurial processes such as improvisation, bricolage, effectuation, interpretive processes, and reflective practice to develop an integrative framework for examining how opportunities are constructed. The framework's components – flexible goals, network transformation, leveraging of contingencies, and resource reenactment – help distinguish when entrepreneurs act to construct opportunities rather than discover and exploit them.

Using this synthetic framework as a lens, and contrasting it to an opportunity discovery mindset, I then examine the cases of the two western firms that deployed field teams to create and launch novel businesses in undeveloped markets – the base of the economic pyramid (BOP). These businesses were intended to provide innovative products and services for which no there were no extant markets; they were also intended to produce social and environmental benefits while creating value for their shareholders.

I term the grounded theory that emerges from these ethnographic studies: *entrepreneurial sensemaking*. In this process, the enactment of an opportunity

discovery mindset in the firms' upper echelons contrasts with the opportunity construction logic used by the field team. The interaction of these distinct outlooks leads to the development of a hybrid logic that meshes some of the firms' initial goals with the artifacts and opportunities that are constructed non-linearly in the field and embeds them in the new venture.

The dissertation contributes to our understanding of: firms' innovation strategies for serving the BOP, the conditions that induce opportunity construction, entrepreneurship as a social process that stretches beyond the single entrepreneur or entrepreneurial team, a category of bottom-up meets top-down strategy making process, and how innovation processes that require isolation from existing networks can be combined with those that call for the leveraging of established relationships.

BIOGRAPHICAL SKETCH

Duncan Duke completed his Bachelor in Science degree in Biochemical Engineering with a specialization in Marine Resource Management with honors at the Tec de Monterrey in 1996. He received a Master in Business Administration degree from a joint program between Tec de Monterrey and the University of California's Bren School of Environmental Science and Management at Santa Barbara in 2002, again with honors. Duncan was also conferred a Master in Science degree in Management by Cornell University in 2009.

Duncan lived for ten years in the Gulf of California region of Mexico, where he worked as an executive director and faculty for Tec de Monterrey Tech and was involved with a variety of NGOs and governmental organizations in addressing regional issues relating to the natural environment, education and economic development. Since 2005, he has worked as a program co-director and senior research associate at Cornell's Center for Sustainable Global Enterprise doing research and outreach on management practices and strategies for serving the base of the economic pyramid (BOP) in sustainable ways. He has also worked and consulted with companies on: new business incubation, product development, market entry strategies, and environmental management in Latin America, the U.S., and Africa.

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LIST OF ABBREVIATIONS

- BOP – Base of the Pyramid
- CBO – Community-Based Organization
- CFK – Carolina for Kibera
- CCS – Community Cleaning Services
- CYE – Confederation of Young Entrepreneurs
- CSR – Corporate Social Responsibility
- HDG – Health Dialogue Group
- LGT – Local Growth Team
- MBA – Masters in Business Administration
- MNC – Multinational Corporation
- NGO – Non-Governmental Organization
- PH – Patrimonio Hoy
- P&L – Profits and Losses
- R&D – Research and Development
- SECI – Socialization-Externalization-Combination-Internalization model
- SCJ – S.C. Johnson and Son, Inc.
- PVDC – Polyvinylidene chloride
- PRA – Participatory Rural Appraisal

CHAPTER 1

INTRODUCTION

In their quest for growth and survival, firms often enter new geographies to achieve synergies and economies of scope (Teece, 1980). When choosing new markets to expand to, a “related diversification” logic often rules (Rumelt, 1974); firms look to markets where they can leverage their existing strengths and capabilities to attain a competitive edge (Klepper & Simons, 2000; Helfat & Lieberman, 2002; King & Tucci, 2002). The basic logic behind expansion to new geographical markets is that these are opportunities for growth that can be captured without having to drastically renew competencies and reconfigure resources¹. So as firms move to sell products and services in new geographies, they usually remain within the same narrow industry (Hennart, 2009).

The larger the firm, the more certainty and greater likelihood of profits it requires in order to pursue an opportunity for expansion (Bhidé, 2004). Thus, most multinational expansion occurs horizontally, between countries that have mirroring market structures or similar economic potential; it occurs across correspondingly munificent environments in which firm-specific resources retain their value (Bartlett & Ghoshal, 1998; Hennart, 2009).

Established firms tend to enter less munificent (i.e. poorer) geographies when one of two opportunities for expansion present themselves: (1) cheaper versions of the firms products – usually achieved by reducing functionality or

¹ I refer to expansion related to sales; firms also expand internationally to secure inputs (for example, by integrating vertically or producing in countries with low labor costs).

quality – are perceived to be attractive to the market, or (2) the segment of the foreign market with equivalent purchasing power to their home market has become large enough to become a market in its own right for the firm's existing products (Ghemawat, 2001). Although firms still face difficulties when they expand into less developed countries (Wells, 1998; Cuervo-Cazurra & Un, 2004), this has been the most prevalent model of sales-driven, North-to-South, corporate expansion in the nineteenth and twentieth centuries. Wilkins (2005) calls it the "American model" even though most multinational enterprises are western European (Roach, 2005). Following in the footsteps of Prahalad and Doz (1987, 1991) – who characterize diversified multinational corporations as multidimensional and heterogeneous organizations that mesh global and local functions – Immelt, Govindarajan & Trimble (2009) call this phenomenon glocalization: manufacturers in rich countries develop products at home and then distribute them worldwide with some adaptations to local conditions, "skimming the top of the emerging markets."

Some western firms, such as the Coca Cola Company, have products and services that have a broad appeal, and have thus been able to take the exact same product across the world. Other firms start with their existing product offerings and use them to make inroads into developing markets, usually serving the small high-income brackets of the population which can afford higher-priced goods. Once they've established a foothold and begin to produce locally, these firms often enable their subsidiaries to begin experimenting with product development and alternate distribution channels in an attempt to increase sales – sometimes by targeting slightly poorer segments of the population. Fast moving consumer packaged goods firms such as Unilever, Nestle, and P&G are classic examples of this mode of entry

and subsequent expansion (Prahalad & Doz, 1987; Bartlett & Ghoshal, 1998; Wilkins, 2005).

FIRMS AND THE BOP

Over the last fifteen years there's been a surge in efforts – by both small and large firms – to establish a different pattern of entry into developing country markets. Instead of moving laterally to serve the top of the local income pyramid with their existing products, they are attempting to directly serve the base of the economic pyramid – the poor (Prahalad & Lieberthal, 1998; Prahalad & Hammond, 2002; Prahalad & Hart, 2002; London & Hart, 2004). This approach contradicts the expansion logic described above. The poor sectors of developing country societies – known as the base of the economic pyramid, or BOP – are usually so different, non-munificent, and foreign to established firms serving richer markets, that attempts to use incumbent capabilities (e.g. stripped down products, existing distribution channels, etc.) to serve them generally flounder and fail. Very few products and services as designed for developed markets are attractive to the BOP at sustainable price points. As they realize this, firms are finding they have to develop entirely new businesses to reach the BOP (Immelt, Govindarajan & Trimble, 2009).

So why are firms now attempting to serve the BOP? From a conventional point of view, it does not make sense; the market space is not munificent, expected pay-offs are very uncertain, and firms' current capabilities and assets provide no immediate leverage or differential advantage. Despite this, increasing numbers of firms from the global North are targeting the BOP, in the last

fifteen years, hundreds – if not thousands – of corporate initiatives at the BOP have been undertaken².

To be clear, western firms and corporations have been selling to the poor for centuries (Wilkins, 1970; Hertner & Jones, 1986; Wilkins, 2005). But this has been in cases where the traditional expansion logic holds – the firms happen to have a product or service they believe is appealing to the segment and profitable for the company. What distinguishes this newer mode of corporate involvement with the BOP is its double motivation. Most new initiatives targeting the BOP strive to both "do well and do good" (Margolis & Walsh, 2001). While some initiatives are driven from a pure corporate social responsibility orientation – meaning that they are seen mostly as cost-center activities that provide corporate-level benefits in terms of public goodwill, enhanced corporate reputation, or more lenient regulation – others are driven by the emerging social movement captured in the motto "applying business thinking to solving the world's problems". This broad movement is embodied in terms such as: social entrepreneurship, BOP strategies, social business, sustainable enterprise, market-based approaches to poverty alleviation, inclusive marketing, and private sector-led development.

Although the movement is still emergent and somewhat inchoate, it has proven very powerful in some sectors and induced the mobilization of significant resources. For example, the Inter-American Development Bank created its Opportunities for the Majority Initiative to engage the private sector in developing businesses for the BOP, and funded it with more than \$100

² Just to give one example, the Opportunities for the Majority Index (developed by the Inter-American Bank and Innovest) includes seventy five publicly traded national and multinational firms operating in the Latin American region that are engaged in BOP-targeted activity.

million dollars; the World Bank's International Finance Corporation 2009 portfolio dedicated \$1.4 billion dollars in investment and advisory service projects to support commercial BOP initiatives; independent investment funds such as IGNIA, Good Capital, and Elevar Equity have amassed hundreds of millions of dollars to invest in this area.

One of the movement's earliest and most visible proponents has been Muhammad Yunus, the micro-credit pioneer. The microfinance movement, which traces its origins to the 1970's, can be seen as one branch of the larger "business thinking to solve social problems" movement. Its focus and nature is embodied in the motto "business by the BOP" since its intent is to stimulate the poor to create and run businesses themselves. Its key underlying argument is that the poor are trapped in their situation by a set of structural elements (e.g. lack of capital, oppressive governance systems, or unproductive lands), and that "business thinking" or a "market orientation" is the mechanism that can remove or alter these constraints. Once these constraints are removed, then the poor can bootstrap themselves out of poverty; one only has to remove the barriers that restrict their creativity and industriousness. Thus, de Soto (2000) argues for restructuring property and business rights in developing countries so that the poor may "unleash" the power of their capital, and Sen (2000) advocates eliminating the "unfreedoms" that limit the poor's self-directed development.

The other main branch of the movement, which originated in developed countries, can be termed "business for the BOP", and is characterized by Prahalad and Hart's (2002) exhortation to large western firms to pursue "the fortune at the bottom of the pyramid". As the title of Prahalad and Hart's article insinuates, this perspective is unconventional in that it envisions substantial

profit potential at the BOP. Instead of bottom-up development driven by people at the BOP lifting themselves out of poverty, the "business for the BOP" movement envisions western private-sector actors building businesses designed specifically to serve the BOP. These businesses are to be both profitable and solve some social or environmental problem. This stream of the movement is often criticized for "infantilizing" the BOP, promoting a new form of "corporate" imperialism, and striving to homogenize the world for the benefit of corporations (Prahalad & Lieberthal, 1998; Chandler & Mazlish, 2005; Simanis, Hart, & Duke, 2008; Hart, 2010). These critiques emanate from the belief that pursuing profits and social good simultaneously is almost oxymoronic; at best, these goals are incompatible, at worst, they are contradictory.

But it is this double motive which provides the movement with its potency, benefiting oneself while benefiting others is a powerful vision; it also poses some very interesting practical and theoretical challenges. As mentioned, historically, business expansion to the BOP has been unhindered by this split rationale. If profits or growth is the single driver, then a firm decides to enter the BOP only when it thinks it has an advantage. But if in addition to profits, a firm also wants to have significant social impact, its problem space and logic of action changes drastically. First of all, entering the BOP is a given – the firm has to enter the BOP in order to have a beneficial impact, regardless of whether it has any relevant competency or product suited for the BOP. Secondly, even if the firm has a product that may be attractive to BOP markets, it is extremely unlikely that the product will naturally produce the poverty reduction or environmental benefits the firm desires. Quite the opposite, the western products with broad BOP appeal have traditionally had

deleterious effects (e.g. soda, refined flour, alcohol, cigarettes, fatty and sugary snacks, arms, etc.). So by definition, the firm usually has to create a new business, a new offering, and a new delivery system that could potentially provide the profits and social benefits envisioned.

This situation motivates the central research question of my dissertation:

How do firms create novel businesses in new market space?

DOING BUSINESS WITH THE BOP

Most of the early documented attempts of firms creating novel businesses to serve the BOP, such as Nike's World Shoe (McDonald, London & Hart, 2002), and Hindustan Lever's Wheel soap (Ellison & Rodríguez, 2003), applied western corporations' traditional methods for new product development to the task. The firms essentially followed Kotler's (1988) dictums – they used market surveys to identify and delineate their target market, conducted "willingness to pay" studies to determine prices and configure their cost structures, and in some cases even deployed professional ethnographers to observe how locals lived and design their products to "fit" local lifestyles. They negotiated terms with their existing or new distribution channel partners, set up regional supply chains, created marketing campaigns, etc. Once everything was in place, they launched the businesses.

This approach to launching businesses is not only applied by foreign or multinational firms. Yunus describes the same process for launching Grameen-Danone's joint venture to produce and sell yoghurt in Bangladesh (Yunus, 2007). By his own account, it took Yunus six months to get from an initial meeting to a memorandum of understanding with Danone that stated the business objectives – with poverty alleviation being a central goal – and an

agreement to invest \$1.1 million dollars. It then took the venture a year to set things up, even though it relied extensively on Grameen's well-established business networks in the Bangladeshi BOP and Danone's global production, product engineering, and marketing capabilities. Amongst other things, Grameen and Danone spent two hundred thousand dollars to buy a rural plot of land, designed and then built a new-generation mid-scale yoghurt plant, found a Chinese provider of edible yogurt cups, organized local smallholder farmers to serve as raw material suppliers, and worked with GAIN (a Swiss nutrition organization) to develop, test, and validate a program to ensure that the product would deliver the expected and meaningful benefits to the poor (Yunus, 2007). After more than a year of preparations and more than a million dollars spent up front, the business was finally launched.

As exemplified by the Grameen-Danone joint venture, most firms targeting the BOP develop their new products and businesses as they would for a low-risk, developed market expansion (Bhidé, 2004) – they invest significant resources to set things up before launching. After some very public and expensive failures, such as P&G's PuR initiative (Hanson & Powell, 2006), some firms have realized that this way of creating new businesses is actually very risky. Product launches are hit-or-miss affairs in developed markets, but these markets at least have a base level of coherence and expectations since potential customers are accustomed to pay for a wide array of products and services, and are generally willing to try new ones if they conform to broad existent categories. At the BOP, these efforts are even more likely to fail because there are no extant markets for the kinds of products and services that generate social or environmental benefits, there usually aren't even any markets for similar or substitute products.

In reaction to these failures, yet sometimes inadvertently, a number of firms have launched businesses at the BOP in a different, more iterative way. Realizing that prediction counts for little in this "turbulent" environment, they have followed an "innovate with the BOP" approach (Simanis, Hart & Duke, 2008).

Again, Yunus (1999) provides an early example of this more iterative approach. His initial micro-credit venture was developed in an experimental fashion that explored many options over several years. He arrived in Bangladesh in 1972, but was really driven to action by the 1974 famine, which turned his attention towards farming and searching for ways to produce more food. At one point, he personally began to teach farmers how to farm, "the local newspaper published photos of us, knee-deep in mud, showing local farmers how to use a string to plant rice in a straight line" (Yunus, 1999). In late 1975, he turned to the "problem of irrigation" to raise a winter crop and created Nabajug Three Share Farm. It was through this organization that he began his first experiments with providing credit – to the relatively richer farmers of the community he was working in. In 1976, he began visiting the poorest farmers, searching for ways to help them, rather than their richer brethren. He generated his first micro-loan (\$27 USD to enable 42 people to work) in an off-the-cuff reaction to his interview with a female stool maker. He financed the first loan himself, requesting no interest or repayment schedule. It then took him six months of negotiation with a local bank to line up a follow-up \$300 loan to the poor. In his own words:

"I did not know anything about how to run a bank for the poor, so I had to learn from scratch... Slowly my colleagues and I developed our own delivery-recovery mechanism and, of course, we made many mistakes

along the way. We adapted our ideas and changed our procedures as we grew. For example, when we discovered that support groups were crucial to the success of our operations, we required that each applicant join a group of like-minded people living in similar economic and social conditions." (Yunus, 1999)

Peer group lending – the mechanism Yunus virtually stumbled upon – is now a central tenet of micro-finance the world over. Grameen Bank is now officially recognized as having started in January of 1977, but more than a year later it was still considered Yunus's "Jobra experiment". It took the firm more than twenty years to reach the milestone of \$100 million in loans (Yunus, 1999).

To be fair, while the origin of Grameen Bank nicely depicts how iterative business development at the BOP can occur, it does not represent the case of a western firm starting a business in a foreign country – Yunus didn't represent anyone but himself at the start, was a native to the area, and was primarily focused on providing social benefits. To this day, Yunus eschews the pursuit of profits when serving the poor (Baron, 2008), Danone clashed with him when it specified that its joint venture with Grameen be established as a for-profit enterprise (Yunus, 1999). Yunus apparently uses certain "business methods" and "business thinking" almost by accident, partly because he was trained as an economist and therefore naturally gravitated towards thinking in terms of capital and funds; and partly because his initial partners were banks.

Cemex's Patrimonio Hoy (PH) illustrates a modern-day multinational corporation with a very strong rent-seeking culture adopting an iterative and experimental approach to innovating at the BOP. In the director of PH, Hector Ureta's words:

"...my boss told us to forget everything we knew about cement, and

see the market with a clean slate, leaving out any prejudices that we may have had from previous experience" (Segel, Chu, & Herrero, 2006).

Ureta was named head of PH in 1998, and set out to create an immersion team designed to understand the BOP cement market in Mexico. He formed an eleven person team and rented an old butcher shop in a low income community on the outskirts of Guadalajara. The team spent eight months in the community, conducting surveys and speaking informally to hundreds of local residents.

In Ureta's words:

"Perhaps our most significant discovery was the realization that we stood a chance to have a real impact on people's lives. We viewed people not just as consumers, but as human beings, with a more holistic perspective, and we realized that selling them more cement would not fix their lives" (Segel, Chu, & Herrero, 2006).

The team eventually designed and implemented an entirely new and innovative business model aimed both at driving cement sales and providing meaningful social benefits. Ureta argued that PH's business model was an efficient and sustainable solution to the living conditions of Mexico's poverty-stricken population and that it also instilled attractive social values such as goal-setting and saving habits. In 2004, six years after its launch, PH reached breakeven at a yearly operation of about \$4 million USD, and was projecting profits of \$2 million in 2005 (Segel, Chu, and Herrero, 2006). Ureta described the experience as follows:

"It has been an interesting ride to this point... We were good at experimenting and changing when we felt we weren't getting it right.

We started by realizing that we were not selling cement, and that we needed to customize our proposal in each deal, something that was quite alien to Cemex's culture" (Segel, Chu, and Herrero, 2006).

And it's not only firms looking to build businesses or learn about the BOP that decide to deploy field teams to explore a potential market and iteratively build a new business. Honda's expansion to the US in the late 1950s and its eventual catalysis of the small motorcycle market illustrates this in an expansion to a developed country (Mintzberg, 1987a).

In 1958, Honda sent two executives, led by Kichahiro Kawashima to the US to assess the market potential for Japanese motorcycles. The team returned to Japan after visiting motorcycle dealerships across the US and reported that "it didn't seem unreasonable to shoot for 10% of the import market" (Pascale & Christiansen, 1989). But Kawashima also states:

"In truth, we had no strategy other than seeing if we could sell something in the United States... we did not discuss profits or deadlines for breakevens... Fujisawa (Kawashima's boss) told me if anyone could succeed, I could, and authorized \$1 million for the venture" (Pascale & Christiansen, 1989).

After haggling with bureaucrats, Kawashima was deployed to the US with only \$110 thousand dollars in cash and \$140 thousand in inventory and parts. The small team that relocated to LA to crack the US market was so strapped for cash that its three members shared a single apartment, two of them sleeping on the floor. It took the team seven years to grow to five Japanese executives (Pascale & Christiansen, 1989).

The main point of the Cemex and Honda examples is that many corporate initiatives to create new businesses in foreign locations are ultimately driven

by the adventures and experiences of a small field team deployed to the location; even when in hindsight they may be portrayed as rational, top-down decisions led by executive managers to exploit pre-identified opportunities (Mintzberg, 1987a).

In my dissertation, I examine in detail the processes that occurred when two western firms deployed field teams to immerse themselves in BOP settings with the task of creating new and innovative businesses that were to be profitable and provide social or environmental benefits. From these in-depth cases I inductively develop a theoretical framework called entrepreneurial sensemaking that helps us understand how the interplay between a field team's evolving appreciation of the business it is developing and senior management's intentions shape the firm's strategic understanding of what the new business is really about, and its ultimate substantiation.

DISSERTATION OVERVIEW

The rest of the dissertation is structured as follows:

Chapter 2 – Theory review

Recognizing that many of the challenges field teams face when trying to create new businesses at the BOP are analogous to those that individual entrepreneurs and start-up teams must overcome when founding their enterprises, in Chapter Two I review the literature and existing theories of entrepreneurship that speak to the open-ended processes that underlie the emergence of novel businesses. I first look at the different conceptualizations of what it means to be an entrepreneur, and then examine the implications these perspectives have for the actual on-the-ground innovation processes. I

analyze the differences between “opportunity discovery” and “opportunity construction” logics and then identify and describe seven broad theoretical approaches to opportunity construction processes: entrepreneurial bricolage, improvisation, effectuation, reflective practice, interpretive processes, muddling through or disjointed incrementalism, and organizational knowledge creation.

Chapter 3 – Theory development

Based on the theory review, in the second chapter I compare and contrast the theories reviewed in the previous chapter to extend the theory on opportunity construction processes by proposing a synthetic framework that builds upon the theories’ common elements and identifies boundary conditions based on the factors they disagree upon. I use a vignette to demonstrate how the constructs of the synthetic framework – goal flexibility, reenacting resources, network transformation, and leveraging contingencies – interact, and how the framework can be used to examine opportunity construction processes. I conclude the section by exploring the implications for the synthetic framework for the discordant elements of the opportunity construction theories.

Chapter 4 – Research Strategy

In this chapter I explain how I collected and analyzed the data that supports my theorizing. I explain why being a participant observer in two sequential, in-depth ethnographic studies is the most appropriate mechanism for generating theory about this emergent phenomenon. I use ethnographic, participant observation, and extensive archival data from a three year study of two independent cases to generate dense theory which captures the complexity of

the dynamics that occur within firms that deploy field teams to create novel businesses in new market space.

Chapters 5 & 6 – SCJ Johnson Kenya Case and ACB Case

These chapters are a “thick description” and a condensed depiction of the efforts of two unrelated firms that deployed field teams to BOP settings with the specific task of creating novel businesses that would provide “triple bottom line” benefits to the firm and to the local communities. Each case study describes at least a year’s activities of each firm, including the efforts of the teams in the field and the actions of their supervisory managers. The descriptions are primarily focused on the social processes and interactions amongst actors; concrete details of the actual businesses and settings have been minimized as much as possible.

Chapters 7 – Discussion

In this chapter I dissect and analyze the case studies in light of the synthetic framework for opportunity construction processes to develop a theory called entrepreneurial sensemaking. First I identify the factors that drive the emergence of an opportunity construction logic and the factors that foment an opportunity discovery logic, examining how they occurred in each case. In general, field teams tended to enact an opportunity construction logic while senior managers tended towards opportunity discovery. Entrepreneurial sensemaking is the process that unfolds as these two parties interact and labor to bridge their two perspectives. Although not guaranteed to produce a favorable outcome, when the interaction is maintained – and conflicts are managed in order not to derail the process – the iterative and collective

sensemaking process can lead to the development of a novel business and a deep, tacit understanding of its implications and potentialities.

Chapter 8 – Conclusions

I conclude by exploring the four main contributions of this dissertation to the theoretical domains of: BOP strategies, entrepreneurship, strategy process, and innovation. I then, outline some avenues for future research, and describe some applications for real-life practice.

CHAPTER 2

THEORY REVIEW

Corporate teams deployed to remote locations and tasked with creating entirely new businesses face many of the challenges and obstacles that a lone entrepreneur or a start-up entrepreneurial firm do.

In this chapter I survey the literature on entrepreneurial processes, with a particular focus on what people actually do when they are attempting to create new businesses. I begin with a broad review of scholars' thinking on entrepreneurship, from the search for specific personality traits that could distinguish an entrepreneur to the view of the entrepreneur not as an individual, but as an economic function – that of disrupting markets and creating innovations.

Next, I explore the differences between two theoretical approaches to opportunities. The one labeled “opportunity discovery” assumes that opportunities are objective features of the environment, and that an entrepreneur's job is to find them and then exploit them. I term the opposing view “opportunity construction”; this perspective sees entrepreneurs as people committed to action, and who use their creative imagination to explore ways to produce new services and products.

I then briefly review seven theories that examine opportunity construction processes from different viewpoints. Some of them, such as effectuation and entrepreneurial bricolage, look specifically at opportunity construction within entrepreneurial settings – as individuals strive to found firms. Others, such as

reflective practice, focus more on how individuals create opportunities within their everyday practices. Finally, another set of theories – interpretive process and organizational knowledge creation – look at opportunity construction within organizations or collectives. I analyze, compare, and contrast these theories in Chapter Three, Theory Development.

ENTREPRENEURIAL PROCESSES

Aldrich (1999) coined the term “nascent entrepreneur” to describe the individual taking action to create an organization. The term refers to “those persons thinking about starting a new firm and involved in activities that could result in a new organization, distinguishing them from ‘entrepreneurs’ who actually have created an operating entity” (Aldrich & Ruef, 2006).

In one of the first empirical studies of nascent entrepreneurs, Reynolds & White (1997) surveyed people randomly selected from the general population to determine the proportion of nascent entrepreneurs. Reynolds and White classified individuals as nascent entrepreneurs if they conducted at least two of a list of activities that Reynolds and White assumed should precede the launching of a business. Examples of these activities include “seriously thinking about starting a new business”, “writing a business plan” or “organizing a start-up team”. Reynolds and White admit that these indicators don’t tell us much about the entrepreneurs themselves, or how businesses get started. In their own words:

“...even though there has been progress in predicting new firm birthrates on the basis of contextual features, these do not start new

firms, people do. Despite the importance of this activity, how individuals create new firms is one of the least-understood features of modern societies.” (Reynolds & White, 1997)

Personality traits and the entrepreneurial function

Early work on entrepreneurship focused on the identification of personality traits as determinants of entrepreneurial success. A variety of traits, ranging from need for achievement (McClelland, 1967) and locus of control (Chen, Greene & Crick, 1998) to overconfidence bias (Busenitz & Barney, 1997) have been posited as important factors determining entrepreneurial performance, but the current consensus is that personality traits at best explain only a very small proportion of entrepreneurial success (Gartner, 1989; Stevenson & Jarillo, 1990).

A research stream that emerged from the Austrian School of economics (Schumpeter, 1934; von Hayek, 1948; von Mises, 1949), developed by Kirzner (1973, 1983), Casson (2003), and others has examined the entrepreneurial function, rather the entrepreneurs themselves (Danhoff, 1949; Gartner, 1985; Gartner, 1989). In Schumpeter’s view, an entrepreneur (or “wild spirit”) is a source of disequilibrium within markets. Entrepreneurs recombine existing conceptual and physical resources to produce innovations that render existing firms or ways of doing things obsolete. Schumpeter assumed inventions were “trivially and abundantly available and known to all sorts of people” (Witt, 1992), what defined an entrepreneur was the willingness and ability seize this opportunities and bear the attendant uncertainty (Knight, 1921). Once

opportunities had been discovered and acted upon, the market would return to equilibrium. (Chiles, Bluedorn & Gupta, 2007). Kirzner provides an opposing (or complementary) perspective; he models entrepreneurs as agents that exploit information asymmetries, coordinate the combination of scarce resources, and engage in profitable arbitrage, helping to bring a market back to equilibrium (Harper 1996, Chiles et al. 2007). Schumpeterian entrepreneurs create disequilibrium; Kirznerian entrepreneurs resolve disequilibrium. Kirzner assumes entrepreneurs are rational (knowing what they want to achieve) and possessing of unique information that lets them identify existing opportunities created by exogenous shocks to the environment. Kirzner's alert entrepreneurs discover profit opportunities by "opening their eyes" and noticing facts staring at them in the face (Harper, 1996). Casson (2003) suggests that entrepreneurs create "market-making" firms by developing specific information-gathering and processing skills which feed their good judgment and help them identify opportunities existent in the environment.

Shane & Venkataraman (2000) argue that the views on entrepreneurial function and individual characteristics need to be united in order to better understand entrepreneurship. They define entrepreneurship research as "the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered and evaluated" and encourage researchers to study the nexus of enterprising individuals and valuable opportunities in the environment, since the outcome of entrepreneurial efforts is determined by the confluence of individuals with unique traits, skills, and mindsets, and extant opportunities with particular

attributes (Shane, 2003). Different people will identify different opportunities from the same discovery (Venkataraman, 1997) as prior knowledge, experiences, and perspectives influence how a new discovery is viewed and exploited (von Hayek, 1945; Shane & Venkataraman, 2000). For example, Shane (2000) studied eight people who recognized eight distinct uses for a single manufacturing technology licensed by MIT.

Research in this vein is focused on elucidating the contextual variables that generate opportunities and has given a renewed impetus to the search for more nuanced individual traits that help explain how some entrepreneurs are better at identifying and subsequently exploiting opportunities. Thus, for example, Baum and Bird (2010) look at how “successful intelligence” and “entrepreneurial self-efficacy” predict entrepreneurial venture growth.

As regards the process of entrepreneurship, this view naturally stresses the search for opportunities. So Gruber, MacMillan and Thompson (2010) describe how serial entrepreneurs identify opportunities in emerging technology fields by constructing opportunity “choice sets”, and Bhardwaj, Camillus and Hounshell (2006) examine how established firms continuously look for entrepreneurial opportunities through a “moving, anchored search” process. Alvarez and Barney (2007) label the logic that underlies this line of theorizing “opportunity discovery”.

Opportunity construction processes

A fundamental critique of the “opportunity discovery” perspective on entrepreneurial action attacks its conceptualization of opportunities as pre-

existent, objective, environmental attributes that are there to be discovered (or not) (Vaughn 1994; Sarasvathy, Dew, Velamuri & Venkataraman, 2003; Chiles, Bluedorn & Gupta, 2007). Critics assert that this view is overly deterministic (de Rond & Thietart, 2007) and disregards human choice and inventiveness in the creation of the future (Buchanan & Vanberg, 1994). Furthermore, they note that the “opportunity discovery” perspective minimizes the role of chance and also fails to consider how the interaction of free will and imagination with the specifics of the situation at hand essentially makes the future open and unpredictable (Lachmann, 1986; Ross & Nisbett, 1991; de Rond & Thietart, 2007). Harking back to Austrian economics’ basis in subjectivism, Lachmann (1986) argues that entrepreneurs use creative imagination to form plans based on their subjective knowledge and expectations oriented towards an unknown and unknowable future. Thus, in strategic and entrepreneurial action, rationality combines with intuition, chance, and a myriad of processes to determine outcomes (Mintzberg, Raisinghani, & Théorêt, 1976).

Theorists who disagree with the “opportunity discovery” perspective and its implications often think of entrepreneurs as individuals who are focused on action; on actively exploring ways to produce new products or services rather than pursuing perceived opportunities (Sarasvathy, Dew, Velamuri, & Venkataraman, 2003). These researchers tend to focus much more on the everyday processes and practices of entrepreneurs and take a much finer-grained look at the reality an entrepreneur perceives and the particular actions and events that lead to the creation of a business. I bundle these diverse perspectives under the umbrella term “opportunity construction processes” and review some of the most relevant ones, (see Table 1 for a review).

Table 1 – Entrepreneurial and creative processes described in the management literature.

Entrepreneurial / creative process	Description
<p><i>Entrepreneurial bricolage</i></p> <p>(Baker, Miner, & Eesley, 2003; Garud & Karnøe, 2003; Baker & Nelson, 2005; Lévi-Strauss, 1968)</p>	<ul style="list-style-type: none"> - Making do with materials at hand - Refusal to enact limitations - Recombination of resources for new purposes
<p><i>Muddling through / disjointed incrementalism</i></p> <p>(Lindblom, 1959, 1979; Michael, 1973)</p>	<ul style="list-style-type: none"> - Goals and values are selected at same time as empirical analysis is done - Only very marginal and incremental activities are considered, the universe of possible outcomes, alternatives, and values is mostly ignored
<p><i>Effectuation</i></p> <p>(Sarasvathy, 2001; Wiltbank et al 2006; Sarasvathy, 2008)</p>	<ul style="list-style-type: none"> - Focus on getting other parties to commit resources to the venture under goal ambiguity - Seek affordable losses rather than calculating opportunity costs
<p><i>Entrepreneurial and organizational improvisation</i></p> <p>(Bhidé, 1994; Moorman & Miner, 1998; Baker, Miner, & Eesley, 2003)</p>	<ul style="list-style-type: none"> - Degree to which composition and execution converge in time - Combine existing routines with unscripted action
<p><i>Reflective practice, knowing in practice</i></p> <p>(Polanyi, 1958; Schön, 1982; Orlikowski, 2002)</p>	<ul style="list-style-type: none"> - Problem-setting – Simultaneously define decision to be made, ends to achieve and means to use - Active synthetic skills of designing a desirable future and inventing ways of bringing it about
<p><i>Interpretive process</i></p> <p>(Lester & Piore, 2004)</p>	<ul style="list-style-type: none"> - Deliberate exploration of ambiguity to generate new ideas - Exploration happens as a conversation among actors
<p><i>Organizational knowledge creation, managing flow</i></p> <p>(Nonaka & Takeuchi, 1995; Nonaka, Toyama, & Hirata, 2008)</p>	<ul style="list-style-type: none"> - Knowledge is product of interactions - Knowledge itself is situated and embodied in relationships and dialogue

Effectuation

Sarasvathy (2001, 2008) contends that opportunities are constructed rather than discovered because entrepreneurs create new businesses by focusing more on their means than on their ends, an operative logic she calls “effectuation”. In effectuation, expert entrepreneurs prioritize the building of a network of committed stakeholders and the avoidance of losses over the pursuit of a pre-specified opportunity or goal. In fact, in effectuation, entrepreneurs construct their preferences and their goals at the same time they construct their business and their market. As contingencies arise, effectuators modify their goals in an attempt to control the future rather than predict it.

Their efforts to uncover slack resources in the environment and to extract commitments from other parties (many times their first customers) dominate their entrepreneurial activities and drive the opportunity construction process. The objectives of the business continually shift depending on who the entrepreneur convinces to join the endeavor and what resources and preferences each actor brings to the table.

Sarasvathy (2008) uses the example of a chef cooking dinner to contrast an effectual approach to a causal logic (her term for the conventional view of entrepreneurship, in which entrepreneurs garner resources to exploit an already identified opportunity). In the causal case, the chef decides beforehand what she would like to prepare – e.g. duck a l’Orange. She then consults a recipe, identifies the required ingredients, embarks on a shopping trip to acquire them, organizes the necessary equipment and utensils, and then cooks the dish. In the effectual process, the chef begins by searching in the pantry and the kitchen’s cupboards to see what foods are available and

what kind of appliances and utensils she may use. Based on what she finds, she then composes a dish on the fly. If her mother offers her some advice while she's at it, or her partner arrives with new ingredients, she may modify what's she's doing to incorporate them. In many cases, the resulting dish may be something she has never prepared before. The example not only illustrates how the effectual entrepreneur uses her means (the available ingredients and utensils) to determine her goal (the resulting dish), it also implies that the outcomes of effectual processes are more likely to be novel and unpredictable than those of causal processes.

Muddling through

Lindblom's (1959) "muddling through" theory states that administrators develop new policy by applying a set of relatively simple heuristics to existing policies because they are very boundedly rational (Simon, 1955; Cyert & March, 1963). Administrators are not "rational-comprehensive", they cannot *ex ante* identify all relevant performance variables, compute all policy outcomes, rate and compare all outcomes in light of all performance variables, outline all possible policy alternatives, and systematically compare all alternatives to identify the one which produces the overall highest performance.

Thus, administrators engage in a series of oversimplified heuristic-based decision processes which enable them to disregard most performance variables, outline a much reduced set of policy alternatives based on previous policies, and through successive limited comparisons eventually settle on a "workable solution". This process has a point in common with effectuation in that evaluation and empirical analysis become intertwined, so means-end analyses are inappropriate or of limited value.

On the other hand, the process is also known as “disjointed incrementalism” (Lindblom, 1979), the implication being that while it may not be possible to predict what the resulting policies will look like, they will only be incrementally different from the existing ones. In other words, muddling through is not conducive to radically novel outcomes.

Entrepreneurial improvisation

Baker, Miner and Eesley (2003) describe a process they call “improvising firms”, contrasting its unpredictability and impulsiveness to “design-precedes-execution” types of organizational foundings. In their words:

“Typically, the founding processes of these firms unfolded during ongoing interaction between the founder and current customers, suppliers, or associates during which the founder recognized some “seed deal” as an opportunity to found a firm.... In no case did a founder describe a primary focus on a plan or market analysis or even thinking through the new firm's overall design or strategy. Founders just started moving toward creating their businesses, improvising their way towards entrepreneurship...” (Baker, Miner & Eesley, 2003)

Weick (2001) calls this way of acting “just in time strategy”. The essence of improvisation (Weick, 1998) is that the acts of composing and performing are inseparable; there is no split between design and production. Improvisation also implies a degree of novelty and coherence in the outcome (Moorman & Miner, 1998; Miner, Bassoff, & Moorman, 2001). Thus, while improvising, entrepreneurs are not pursuing pre-defined opportunities; they are deliberately attempting to create something novel.

Entrepreneurial Bricolage

Baker and Nelson (2005) add to the notion of improvising while founding a business with the “entrepreneurial bricolage” construct. They define it as “a bias toward action and active engagement with problems or opportunities rather than lingering over questions of whether a workable outcome can be created from what is at hand”. Bricoleurs refuse to enact limitations that reflect external rules and standards, and by doing so are able to reframe “the odds and ends” they have at hand and recombine them to create fresh resources where there weren’t any beforehand. Rather than search for opportunities, bricoleurs construct them by reconfiguring and reenacting the resources they have at hand. Bricoleurs also view people as resources they can reframe as needed; many customers are originally friends and some customers later become friends, suppliers frequently become customers and vice versa.

Garud and Karnøe’s (2003) use of the term “bricolage” is slightly different. While they do use it to denote resourcefulness and improvisation on the part of actors, they suggest that entrepreneurship is “a larger process that builds on the efforts of many” and that the accumulation of inputs from multiple actors generates a momentum that harnesses the inputs of distributed actors while simultaneously enabling and constraining their paths. They describe the emergence of the wind turbine industry in Denmark not as the discovery of pre-existing underutilized resources by specific individuals, but as the transformation of resources by many different actors. In their view, bricolage is the mutual, co-shaping of emergent outcomes via knowledge embedded in practices.

Reflective practice

Schön (1982) uses the term “reflective practice” to better describe the activities accomplished practitioners perform in their everyday lives as they deal with situations which are inherently complex, uncertain, unstable, unique, and laden with conflicting values. In Ackoff’s words:

“...managers are not confronted with problems that are independent of each other, but with dynamic situations that consist of complex systems of changing problems that interact with each other. I call such situations messes. Problems are abstractions extracted from messes by analysis; they are to messes as atoms are to tables and charts... managers do not solve problems, they manage messes.” (Ackoff, 1979)

A professional “reflects in action” and “knows in doing” when she “sets the problem” by simultaneously experimenting with the objective to be achieved, the means to be used, and the parameters of the decision. As she constructs an understanding of the issue through generative metaphors and spins out lines of inference, she engages in double-loop learning to continuously reframe it in search of a coherence or internal logic that resonates with her experience (Argyris & Schön, 1974; Schön, 1982; Orlikowski, 2002). The process is a reflective conversation with a unique and uncertain situation which is highly dependent on accumulated tacit knowledge (Polanyi, 1958) and embraces surprise, puzzlement and confusion as resources for building novel interpretations. In this view, knowing emerges “from the ongoing and situated actions of organizational members as they engage the world” (Orlikowski, 2002). Furthermore, and parallel to improvisation, knowing cannot be separated from practice (Polanyi, 1958; Schön, 1982; Orlikowski, 2002).

Interpretive process

Building on Schön's insights, Lester and Piore (2004) have developed the concept of interpretive process which is called for in radically ambiguous situations, when the task is "problem eliciting" – to imagine outcomes and determine what their properties should be. Rather than focusing on the single practitioner dealing individually with an issue, Lester and Piore visualize the interpretive process as the emergence of a language community – as an ongoing conversation that leverages ambiguity as a resource for the generation of new ideas. In this process, the manager's role is to invite participants to the conversation, set its direction, maintain its open-endedness, and encourage different viewpoints and the exploration of ambiguity. Over time and through interaction, the participants in the conversation are able to recombine disparate elements into new categories which they slowly come to internalize. In this manner, an "opportunity" is constructed through interaction and the co-creation of new and shared cognitive schema.

Lester and Piore's idea is developed mainly from case studies of these conversations occurring within firms, typically around the design of a new product or business. The broader literature on organizational interpretation defines it as the process of translating events, extracting meaning, developing shared understanding, and assembling conceptual schemes among a group of organizational members (Daft & Weick, 1984).

Organizational knowledge creation

Nonaka and Takeuchi's (1995) organizational knowledge creation theory (also known as the SECI or socialization-externalization-combination-internalization model) – although conceived to explain knowledge creation processes within

organizations – incorporates or informs many of the opportunity construction processes described above.

In Nonaka, Toyama and Hirata's (2008) words, "Knowledge is a resource that is created by human beings in relationships... it is not a static substance or thing but an ever-changing process of interaction in an ever-expanding field of relations". The SECI model is a frame-breaking creative routine for self-renewal that incorporates an implicit critique of firms as information processors (Teece, 2008) and thus also of the "opportunity discovery" logic; if knowledge is created through practice and is not static, then by definition opportunities cannot be pre-defined. Nonaka and Toyama (2005) propose that firms differ not because they exploit different opportunities, but because they want and strive to differ; they evolve differently because they envision different futures and create the structures to realize those futures. Nonaka and Takeuchi's (1995) conceptualization of knowledge creation and strategic direction as the product of shared activity and interaction resonates with Lester and Piore's (2004) notion of a creative process of constructing meaning together. In essence, it suggests that fabricating opportunities is a dialectical co-creation process.

CHAPTER 3

THEORY DEVELOPMENT

In this chapter I develop a framework for examining opportunity construction processes. I first identify and discuss the elements that the opportunity construction theories reviewed in the previous chapter hold in common. I show how these elements are embodied in each theory and note the cases in which particular elements are not present in some of the theories. I also surface some of the elements and assumptions that are contradictory across these theories.

Building on the elements in common – and explaining how I deal with the discordant elements – I then synthesize a parsimonious and overarching theoretical framework for examining opportunity construction processes. I call it the synthetic framework for opportunity construction processes. I end the section with a general comparison of the opportunity construction and opportunity discovery logics.

OPPORTUNITY CONSTRUCTION PROCESSES

The very definition of opportunity – a situation or condition favorable for attainment of a goal (Webster's Dictionary, 2000) – logically implies a set of external environmental features independent of the entrepreneur or agent pursuing the opportunity. This means that an opportunity creation/opportunity discovery dichotomy is problematic – the word opportunity belongs to the epistemological domain of the opportunity discovery logic. An opportunity

construction logic belongs to a domain where the concept of opportunity itself does not make sense – once an opportunity is constructed, it no longer exists, what you would have is an exploited opportunity.

Despite this confusion, I term the processes that underlie these approaches to constructing the future: opportunity construction processes. I do this because my focus is not on whether opportunities truly exist or not, but on the logics of action espoused by individuals engaged in entrepreneurial action. I'm interested in how they act; how their behaviors vary depending on whether they see themselves as pursuing opportunities or constructing the future. The two *logics of action* are dichotomous.

Common elements of opportunity construction processes

Although many of the theories of opportunity construction described in the Theory Review Chapter were developed for the most part independently, they contain some common elements that provide the basis for an overarching theoretical framework for thinking about opportunity construction. In this section I describe each of these shared elements and show how they are developed in each theory. Table 2 lists and describes these elements and Table 3 shows which of the theories embody each element.

Table 2 – Common elements of opportunity construction theories.

Shared Element	Description
Focus on means	Entrepreneurs rely on their means at hand to shape outcomes rather than let specific goals determine the means they need to acquire
Reframing resources	Entrepreneurs repurpose existing resources, exploit slack resources in the environment, and “create” resources from non-resources
Forging networks	Entrepreneurs create innovations by catalyzing new networks and adapting the nature of their existing relationships
Spontaneous action	Entrepreneurs embrace surprise and react in unscripted ways to unforeseen events, many times almost immediately

Table 3 – Distribution of common elements across opportunity construction theories.

Entrepreneurial / creative process	Focus on means	Reframing resources	Forging networks	Spontaneous action
<i>Bricolage</i>	✓	✓	✓	✓
<i>Muddling through</i>	✓			
<i>Effectuation</i>	✓	✓	✓	✓
<i>Improvisation</i>	✓	✓		✓
<i>Reflective practice</i>	✓	✓		✓
<i>Interpretive process</i>	✓	✓	✓	✓
<i>Knowledge creation</i>	✓	✓	✓	

Focus on means

For the most part, theories of opportunity construction posit inductive, non-predictive processes coupled to goal ambiguity. The majority of the reviewed theories discuss this in terms of means and ends becoming conflated. In the extreme, the available means entirely determine the ends to be pursued; means are not chosen in light of pre-selected goals. Table 4 lists the primary means that influence entrepreneurial action for each of the theories.

Table 4 – Posited means of opportunity construction theories.

Opportunity construction process	Means
<i>Entrepreneurial bricolage</i>	- Reframed resources at hand which others do not recognize as such
<i>Muddling through</i>	- Changes at the margins to existing policies
<i>Effectuation</i>	- An effectuator’s existing abilities, stock of knowledge, and social networks
<i>Entrepreneurial and organizational improvisation</i>	<ul style="list-style-type: none"> - An organization’s declarative and procedural memory - An individual’s prior learning and professional networks
<i>Reflective practice, knowing in practice</i>	- A practitioner’s extensive experience, embodied in a “knowing in practice”
<i>Interpretive process</i>	- The conversation, who gets invited to it, and the objects and practices it revolves around
<i>Organizational knowledge creation, managing flow</i>	- Dialectical knowledge creation process itself and the specific practices its participants engage in to maintain it

Lindblom (1959) states “Selection of value goals and empirical analysis of the needed action are not distinct from one another but are closely entwined”. He classifies a policy as “good” if analysts can agree on the immediate steps to

take, independently of whether they agree what the goal should be or whether the policy will achieve it.

Sarasvathy's (2001, 2008) entire theory of effectuation – including its name – is premised on means being prioritized over ends; the final shape of an “effectuated” business depends entirely on who the entrepreneur manages to convince to join her (who she knows), and the argument she can make to convince partners (who she is and what she knows). In Sarasvathy's (2001) own words, effectuation processes “take a set of means as given and focus on selecting between possible effects that can be created with that set of means”. The means that Sarasvathy emphasizes are a person's abilities, stock of knowledge, and social networks.

Baker and Nelson (2005) argue that entrepreneurial bricoleurs are able to build unique services by recombining elements at hand. Moreover, the form of the resulting artifact – the unique service created – is dependent on the idiosyncratic manner in which the bricoleur enacts his resource environment (Penrose, 1959). While the bricoleur usually wants to solve an immediate problem, the act of “making do” with what is readily available often follows a “meandering and path-dependent trajectory dominated not by clear vision and careful a priori planning, but busy serendipitous combinations” (Baker & Nelson, 2005).

In organizational improvisation (Weick, 1998; Baker, Miner & Eesley, 2003), the use of unscripted action is not guided by pre-defined goals. Improvisers do not pursue a well delimited opportunity (an end); on the contrary, they seek new effects. While their ends are undefined, their means are not – they build on their procedural and declarative memory (Moorman & Miner, 1998). As Miner, Bassoff, and Moorman (2001) state, “the result of prior learning and

organizational memory shapes the skillful and fruitful improvisation of novel performances". It is the reliance on sound means that determines an improvisation's coherence and innovativeness. Baker, Miner, and Eesley (2003) stress the role of personal and professional networks as one of the primary means used in improvising firms.

In the interpretive process (Lester & Piore, 2004), managers deliberately court ambiguity as a medium for producing the range of alternatives from which business choices are made; it is a generative process for creating new ends. Lester and Piore (2004) point out that many times "the product developer starts out without really knowing what she is trying to create". In this process, the conversation – and the objects and practices around which it evolves (Carlile, 2002) – constitutes the primary means which determines the options that will be generated.

Reflective practitioners (Schön, 1982) are embroiled in conflicts of values, goals, purposes, and interests at the same time that they are dealing with complex, uncertain, unstable, and unique situations. When they "set the problem", they simultaneously define the decision to be made, the ends to be achieved, and the means which may be chosen. The principal meta-means brought to bear is the practitioner's "knowing in action" (Orlikowski, 2002) or ability to "reflect in practice" (Schön, 1982) – an incommunicable ability developed through practice to iteratively interrogate a given situation and make sense of it in a way that enables the application of existent knowhow in a coherent manner.

Nonaka and Takeuchi's (1995) SECI model of tacit knowledge gradually becoming explicit and embodied in archetypes transcends the means-precedes-ends logic – it represents the total conflation of means and ends. In

Nonaka and Takeuchi's (1995) world, when creating concepts, organization members do not choose a set of means to achieve a certain goal, nor do they simply let their current means determine their ends; they strive to generate new-to-the-world concepts by focusing primarily on the process, constrained only by a general direction set by senior management – the organization's "higher intention".

Reframing Resources

Learning to see things differently is an oft quoted maxim for the stimulation of creativity. It is also an action implied in most of the reviewed opportunity construction theories and is particularly central to entrepreneurial bricolage. Baker and Nelson (2005) characterize bricoleurs variously as those with a "conscious and frequently willful tendency to disregard the limitation of commonly accepted definitions of material inputs, practices, and definitions and standards, insisting instead on trying out solutions, observing, and dealing with the results", or those who "refuse to enact the limitations imposed by dominant definitions of resource environments" and who "consciously and consistently test conventional limitations". By finding novel uses for what they have at hand, bricoleurs are able to construct innovative or personalized services on the spot. In Penrose's (1959) words: "Different firms will discover and elicit different services and combinations of services from similar objective resources."

Sarasvathy's examples (2001, 2008) illustrate the use of resources in novel manners in effectuation. In her "Curry in a Hurry" vignette, in which an entrepreneur is looking to create a business around Indian cooking, an effectual process could lead her to write a book and go on the lecture circuit –

based on her “quirky personality”, a resource not recognized at the start of the process nor a priori relevant to Indian cuisine businesses. In the example of how U-Haul came about, Sarasvathy describes how “the Shoens built the first U-Haul trailers using the ranch’s automobile garage and milk house as the first manufacturing plant” and how the trailers themselves were used as unconventional ad display sites. As with entrepreneurial bricoleurs, effectuators appear to be driven to find new uses for existent artifacts because they are deliberately trying to build businesses without committing resources up front. In both theories, one of the key resources often reframed is people; initial customers are frequently converted to franchisees, investors, salespeople, etc. (and vice versa).

Reframing resources can be viewed as the essence of improvisation. While in the organizational literature improvisation has been popularized as the degree to which the composition and execution of an action converge in time (Weick, 1998; Moorman & Miner, 1998; Baker et al., 2003), its original meaning in music and artistic performance also incorporates the creative use of existing material. It also implies a coherent improvement or the performance of something uniquely valuable; random note playing is not improvisation. In Berliner’s (1994) words “Improvisation involves reworking precomposed material and designs in relation to unanticipated ideas conceived, shaped, and transformed under the special conditions of performance, thereby adding unique features to every creation”. Baker, Miner, and Eesley’s (2003) accounts of entrepreneurial improvisation also exemplify how entrepreneurs often reframe their customers as potential partners.

Reflective practitioners (Schön, 1982) set problems by selecting the “things” of the situation, setting the boundaries for their attention to it, and imposing upon

it a coherence which allows them to say what is wrong and what directions the situation needs to be changed in. Selecting the “things” to pay attention to is an act of resource construction. Schön describes reflective practice as making sense of something troubling, puzzling, or interesting by reflecting on the understandings implicit in the practitioner’s action – understandings which are surfaced, criticized, restructured, and embodied in further action. He illustrates resource reframing in his example of how a master architect used an unforgiving hillside – which his student was visualizing as a handicap to a building’s design – as the actual basis for a coherent and innovative design.

Lester and Piore (2004) stress how design “conversations” aimed at creating new products or services occur around objects and practices – conversation pieces, or transient constructs (Lanzara, 1999). These conversations are the exploration of different views of the same situation; they are reinterpretations or reframings of the situation designed to generate ambiguity, not exchange information.

In Nonaka and Takeuchi’s (1995) theory of organizational knowledge creation, fluctuation and creative chaos are deliberately injected into an organization through top management’s “strategic equivocality” or ambiguity with respect to philosophy or vision (and sometimes also a sense of crisis) in an attempt to make the organization’s members “face a ‘breakdown’ of routines, habits, or cognitive frameworks.” This “breakdown” then offers an opportunity for members to reconsider their fundamental thinking and perspective; they can reflect or question value and factual premises upon which corporate decision making is anchored, and thus generate a wider set of choices. Nonaka and Takeuchi’s (1995) example of how Honda developed the “Tall Boy” concept (a car based on a spherical shape) is an extreme version of reframing not a

resource, but a liability, into a resource. In their words:

“The Tall Boy concept contradicted the conventional wisdom about automobile design at the time, which emphasized long, low sedans. But the City’s revolutionary styling and engineering were prophetic. The car inaugurated a whole new approach to design.” (Nonaka & Takeuchi, 1995)

Forging networks

Creating and enacting fresh social networks is a critical element of many opportunity construction theories. Some of them (e.g. effectuation) advocate the outright creation of brand new social networks while others posit the transformation of the nature of existing relationships (e.g. network bricolage). As described in the section on reframing resources, theories on improvisation, bricolage, and effectuation all consider how opportunity constructing entrepreneurs leverage existing relationships in novel ways. For example, initial customers are many times co-opted to become investors, franchisees, promoters, partners, suppliers, friends, advisors, etc. Baker and Nelson (2005) call this “multiplex ties”. At more personal levels, family members are many times used as unpaid employees (Ruef, Aldrich, & Carter, 2003) – strong ties and homophily tend to be more influential factors in shaping incipient entrepreneurial networks than are individuals’ functions or social roles. But while leveraging existing networks and using them in novel ways (essentially Baker and Nelson’s definition of network bricolage) is modeled explicitly, the dynamic versions of the theories – and their examples – usually imply the addition of new relationships. In other words, existing networks are not only repurposed, they are also extended.

Sarasvathy (2001) proposes as one of effectuation's four core principles the use of strategic alliances rather than competitive analyses. The central mechanism in a dynamic model of effectual entrepreneurship is the nodal actor's elicitation of commitments from other actors towards the creation of a new artifact. As interactions in the effectual network become embodied in actual commitments, the network grows and eventually coalesces into a new market (Sarasvathy, 2008). The act of creating a new network is the driver of the dynamic effectual process.

In entrepreneurial and network bricolage (Baker et al., 2003; Baker & Nelson, 2005), the focus is more on exploiting existing relationships for new purposes, but in their examples, the authors show how existing relationships are often leveraged to create new relationships (contacts of contacts) and thus extend the network to access fresh resources. For example, Baker, Miner, and Eesley (2003) describe the case of a firm pressing an existing customer to provide access to a much larger firm with which the customer was in an alliance with in order to make a sales pitch to it. Baker and Nelson (2005) state that firms engaged in bricolage "created customers from people who otherwise would not be part of the market". They also recognize that bricoleurs' bounded local networks are one of the key impediments to growth for firms continuously engaged in bricolage – if the entrepreneurs cannot grow their networks, they cannot grow their businesses.

At its heart, Lester and Piore's (2004) interpretive process requires the formation of new networks composed of parties with different mindsets and perspectives. Their examples of product development teams highlight how different parts of a business have to be merged or how firms have to seek out and then learn to work with partners that have very different cultures and world

views. Thus, in their example of the development of cellular telephones, they describe how new networks had to be developed between telephone equipment makers and radio producers. In the example of Levi's transforming itself from a manufacturing company to a fashion house, the firm had to cross traditional boundaries and create networks into the previously distinct industries of textiles, laundering and finishing, and washing machines. The metaphor Lester and Piore use for managing the interpretive process – that of a cocktail party host that facilitates conversations – starts with choosing the guests that will participate and have interesting things to say to each other. Nonaka and Takeuchi (1995) propose a very similar requirement for the creation of organizational knowledge. They state:

“the sharing of tacit knowledge among multiple individuals with different backgrounds, perspectives, and motivations becomes the critical step for organizational knowledge creation to take place... to effect that sharing, we need a ‘field’ in which individuals can interact with each other through face-to-face dialogues... The typical field of interaction is a self-organizing team, in which members from various functional departments work together to achieve a common goal... a self-organizing team facilitates organizational knowledge creation through the requisite variety of the team members.” (Nonaka & Takeuchi, 1995)

Nonaka and Takeuchi do not specify how these new networks are formed, only that they must be new networks that incorporate individuals with different skills and experience bases.

Spontaneous action

Most of the reviewed theories incorporate extemporaneous action in one way or another. The importance of the context in which opportunities are fabricated is captured by several of the theories by the way in which they embrace unforeseen contingencies, surprises, and ambiguity. A key component of Sarasvathy's effectuation logic is the entrepreneur's penchant for basing his action on the features of the environment that he can control, rather those which he may try to predict (Wiltbank, Dew, Read, & Sarasvathy, 2006). Effectuators almost instinctively distrust information – such as market research reports – aimed at predicting future states, and do not formally plan or use positioning strategies designed to exploit future situations. Instead, they base their actions and decisions on the features of the environment they can control, and strive to make as much of the environment endogenous to their decision making process (Sarasvathy, 2008). A reduced emphasis on prediction goes hand-in-hand with the flexibility needed to be able to quickly change direction and harness contingencies as they arise. In her original articulation of the theory, Sarasvathy (2001) specifically advanced the exploitation of contingencies as one of effectuation's four core principles.

While the theory of "muddling through" (Lindblom, 1959, 1979) does not explicitly advocate impromptu action for the exploitation of unforeseen events, it does highlight the futility of comprehensive planning. By successively comparing a limited set of policy alternatives, all of them minor modifications of the existing policy, the decision maker is not planning ahead but simply moving forward based on a narrow selection of some elements of the existing context (i.e. existing policies).

By definition, bricoleurs do not plan ahead; making do with what is at hand to

solve immediate problems requires spontaneous action. Entrepreneurial bricolage does imply the leveraging of emergent contextual features. Baker and Nelson's (2005) example of Biggs Dig illustrates this. Dig founded a firm to buy polluted and shuttered mines on the cheap, clean them up, and subsequently sell the restored properties. He was so adept at inventing effective restoration processes that he often made money from the restoration itself – for example by selling reclaimed coal. On one occasion, he managed to clean up a huge, toxic tail pond to such a degree that instead of selling the restored property, he decided to start a fish farm in the erstwhile tailing pond. Improvisation is obviously about ad lib action; when composition and execution of an action converge in time, there is no planning. The way it has been developed as a construct, improvisation does not consider the leveraging of contingencies, inasmuch as contingencies are defined as emergent external features of the environment. To the contrary, improvisation is mostly conceptualized as building primarily on the improviser's experience and skill set (Berliner, 1994; Weick, 1998) or an organization's memory (Moorman & Miner, 1998). Emergent properties of the context can be said to be incorporated into an improvisation when the immediately preceding acts of improvisation are considered to constitute the environment; improvisational action builds upon itself. This can be more clearly envisioned when considering group improvisation – be it a musical band jamming or a comedy troupe adlibbing a skit. When improvisation is a shared activity, each individual builds upon what is contributed by others, she leverages what are essentially unforeseeable contingencies that arise from the collective improvisational performance.

Problem-setting in reflective practice is about incorporating the situation at

hand in the simultaneous structuring of the goals and decision parameters. Schön (1982) posits that much of reflection-in-action hinges on the experience of surprise – of the unexpected – experienced during professional practice, which tends to include an element of repetition (e.g. cases, projects, accounts, sessions, etc.). A practitioner experiences many variations of a small number of types of cases and is thus able to “practice” his practice and develop a repertoire of expectations, images, and techniques. If there are no surprises or challenging contexts to be incorporated into problem-setting, his knowing-in-practice becomes tacit, automatic, and specialized, leading to a narrowness of vision and eventually to a diminution of reflection while practicing. Without unscripted action and the embrace of surprise, reflective practice gradually degrades to simple and mindless routine. Schön (1982) advocates: the practitioner “must allow himself to experience surprise, puzzlement, or confusion” in order to renew and maintain productive and meaningful reflection in action.

Interpretive processes also have spontaneous action at their core. An interpretive process can be viewed as an open-ended conversation which draws on the experiences and understandings of its participants and thrives on their efforts to make their viewpoints compatible. The art of conversation is accomplished and dialectical adlibbing; participants cannot plan their contributions beforehand, they must spontaneously build upon others’ immediate contributions. Thus, the outcome of the conversation or its final form cannot be predicted.

Spontaneous action is orthogonal to a focus on means. An entrepreneur who looks to her means to define her goals can still be pretty deliberate about achieving those goals and not engage in any spontaneous action in reaction to

unforeseen contingencies. Likewise, goal-oriented entrepreneurs may act extemporaneously to achieve said goals, especially when unexpected circumstances may threaten to derail them.

Discordant elements of opportunity construction processes

The reviewed opportunity construction theories also contain some implicit assumptions or implications which are incompatible. To create a unified framework that synthesizes these theories, I now describe and explore these contradicting elements in order to justifiably discard some or propose boundary conditions under which either set of the conflicting elements function. Table 5 lists and describes these discordant elements.

Table 5 – Discordant elements of opportunity construction theories.

Discordant Element	Description
Locus of action / Driving agent	Some theories assume an individual entrepreneur drives the process or has the innate ability to construct opportunities – others model opportunity creation as a result of collective action and interaction
Degree of novelty	The theories vary on their reliance on path dependency versus path creation as mechanisms for generating novelty and thus imply different likelihoods for the generation of novelty

Locus of action / Driving agent

The reviewed theories represent two distinct perspectives on the role of the individual in the fabrication of opportunities. Some of the theories view the whole process as driven primarily by a single individual whereas others stress the importance of collective action and interaction for the construction of an opportunity. Table 6 shows which theories adhere to each perspective.

Table 6 – Locus of action in opportunity construction theories.

Individual entrepreneur	Collective interaction
<ul style="list-style-type: none"> -Effectuation -Bricolage -Reflective practice -Improvisation 	<ul style="list-style-type: none"> -Muddling through -Interpretive process -Organizational knowledge creation

The logic of effectuation is derived from the in-depth study of “expert entrepreneurs”, individuals who have successfully established and developed more than one enterprise (Sarasvathy, 2008). This basis subtly introduces a bias towards the innate or learned abilities of the accomplished effectuator – an individual with the right expertise and strong drive for assembling networks of committed actors and for finding slack resources in the environment. While the dynamics of effectuation require the participation of many actors in order to crystallize a market, the theory implicitly assumes that a focal effectuator sets things in motion and possesses the skills and drive needed to motivate the process.

Entrepreneurial bricolage was also constructed from interviews with individual entrepreneurs or business managers (Baker & Nelson, 2005). Thus, the bricoleur is characterized as an individual who has an inherent skill for putting things together in different ways and creating resources from nothing. In fact, Baker and Nelson (2005) show how firms that continually use bricolage cannot grow – in part because the bricoleurial capability resides in a single individual. Firms founded through bricolage that do grow, do so by abandoning

bricoleurial activities once they have established themselves. It must be noted that alternative conceptualizations of bricolage, such as Garud and Karnøe's (2003) do construe it as a broader process that builds upon the efforts of many.

Reflective practice is a theory explicitly created to explain how individuals deal with unique and unstable situations. Schön makes no effort to explore what the organizational or collective implications of the theory might be and even argues that any apparent "collective" order should be treated as merely the aggregate impact of actions by individuals (Argyris & Schön, 1978). Orlikowski (2002) has attempted to create an organization level construct for knowing-in-practice, yet the practices she bases it on are mostly focused on establishing organizational identity (e.g. sharing identity, interacting face to face, supporting participation, etc.) – she does not deal with the practices relevant to opportunity construction (e.g. problem setting).

Improvisation is also generally thought of as occurring at the individual level (Berliner, 1994; Weick, 1998); researchers have described improvisation by individual musicians, teachers, therapists, actors, and athletes (see Moorman & Miner, 1998 for a review). Moorman and Miner (1998) argue that improvisation can also be conceptualized at a collective level, as other organizational features such as memory, culture, and routines often are. Their manner of raising the level of analysis is not by analyzing how improvising individuals interact – as they would in improvisational theater – but by anthropomorphizing organizations and ascribing to them additional capabilities such as memory.

The opposite perspective, encapsulated in Nonaka and Takeuchi's knowledge creation theory as well as Lester and Piore's interpretive process, stresses the importance of the collective in the emergence and construction of an opportunity. It is through dialectic interactions between actors that a new artifact arises. These theories do not minimize the role of the individual entrepreneur; they simply recast it. In the interpretive process, the entrepreneur is a host who invites participants to a conversation, sets its direction and nurtures the unfolding process without trying to control it.

In Nonaka and Takeuchi's (1995) SECI model, there are several drivers of the process with different roles which they capture in their "knowledge-creating crew" composed of knowledge practitioners (front line employees), knowledge engineers (middle managers), and knowledge officers (top managers). While the top managers provide the visionary ideals or general direction, Nonaka and Takeuchi celebrate the middle managers as the key agents who mediate between "what should be", and "what is". The front line employees are viewed as those who really understand what's going on, but need the middle managers to help them make sense of the reality and align it with the organization's higher goals. Lindblom's "muddling through" logic also implies distributed agency in the opportunity construction process as the design and implementation of new policies is assumed to occur as a negotiated process where the priorities, values, and desired outcomes of any individual policy promoter or analyst have to be incorporated into a proposal that all parties can agree on.

Degree of novelty

A powerful and authoritative perspective on the emergence of novelty is that it is a path dependent phenomenon (David, 1985; Arthur, 1990). Rather than a negation of the past, path dependent novelty is viewed as elaboration in a specific direction that is determined by how a particular sequence of events unfolds. Proponents of this perspective often celebrate historical accidents as the sources of novelty. David's (1990) account of the emergence of the QWERTY keyboard is a classic example.

An alternative perspective on novelty – one that is more aligned with the opportunity construction theories – is that of path creation (Garud & Karnøe, 2001). Entrepreneurs construct a path to novelty as they meaningfully navigate a flow of events even as they constitute them. Entrepreneurs are thought of as knowledgeable agents with a capacity to reflect and act in manners different than those prescribed by existing social rules and taken-for-granted institutional artifacts.

In an entrepreneurial context, novelty is not simply the emergence of something new or different; it also implies the creation of something valuable or useful. Novelty in entrepreneurship echoes the definition of organizational creativity: the creation of a valuable, useful new product, service, idea, procedure, or process by individuals working together in a complex social system (Woodman, Sawyer, & Griffin, 1993).

The opportunity construction theories reviewed vary in their allegiance to path dependency or path creation perspectives on novelty. Table 7 describes how each theory relates to this dimension.

Muddling through is the theory closest to a path dependency perspective on the emergence of novelty. As analysts create new policies by negotiating modifications to existing policies that they could potentially agree upon, they inevitably produce outcomes which are only incrementally different from the status quo. While the value provided by the new policy might be substantive, the degree of novelty constructed tends to be low because the policy is likely to be quite similar to its predecessor.

Table 7 – Outcome novelty in opportunity construction theories.

<p style="text-align: center;">Low novelty <i>Path dependency</i></p>	<p style="text-align: center;">Mid-level novelty <i>Path creation</i></p>	<p style="text-align: center;">High novelty <i>Path creation</i></p>
<p>Muddling through</p>	<p>Bricolage Reflective practice Improvisation</p>	<p>Effectuation Interpretive process Organizational knowledge creation</p>

The rest of the theories agree ontologically and epistemologically with a path creation perspective but suggest the production of different levels of novelty. Some of the theories imply that the novelty produced will tend to have an upper boundary, I call these mid-level novelty theories: bricolage, reflective practice, improvisation. This is because while the constructed opportunity might be different and new-to-the-world, its value and usefulness are often limited. Two factors can potentially limit the value of these constructed opportunities: the permanence of their outcomes, and their replicability or growth potential.

Entrepreneurial bricoleurs often cobble together unique solutions by using unconventional resources, but as Baker and Nelson (2005) point out, these

solutions are usually makeshift and impermanent. The bricoleur providing a service many times only provides a brief respite from the underlying problem, and has to continually revisit his contrivance to ensure it remains functional. In many cases, the bricoleur provides a temporary solution and then moves on to other issues. This is nicely illustrated by Baker and Nelson's (2005) example of the motorcycle repairman who provided a temporary fix to a known customer free of charge in the hopes of gaining future access to the customer's "sand-cast engine block". The customer eventually had to return for a conventional repair.

The novelty produced through reflective practice is limited by the fact that it only serves the individual practitioner and the unique case he is working on. The motto "treat the person, not the illness" means that each case is "a universe of one". The constructed opportunity cannot be replicated beyond the individual case and does not provide a base for growth (other than for honing the practitioner's reflecting-in-action skills). Improvisation suffers both detriments to the creation of value: it is impermanent and its outcomes tend to be non-replicable and non-scalable.

The theories that don't place an upper bound on the degree of novelty that their constructed opportunities can produce include: effectuation, interpretive process, and the SECI model of organizational knowledge creation. While the effectuation logic is ultimately algorithmic (an effectuator may apply its principles but still fail), its potential for creating novelty is unbounded. Because it specifically advocates the creation and incorporation of new networks, it includes the necessary mechanisms for potentially multiplying the new value that might be created. Sarasvathy's (2001) example of how U-Haul grew from a single trailer in 1945 to complete coverage of the US by 1949 illustrates this

ingrained potential for growth.

The interpretive process's and SECI's focus on the production of an opportunity at the collective level also allows for the creation and propagation of value beyond an individual case. Moreover, both of these theories are more applicable to interacting members of organizations who are specifically tasked with creating new products and services. Once an opportunity is embodied in a particular product or standardized service that a firm will offer, the provided value can expand well beyond the focal actors involved in its original creation. The broader organization also provides the resources for concretizing the opportunity and making it more permanent.

SYNTHETIC FRAMEWORK FOR OPPORTUNITY CONSTRUCTION

The shared elements of the reviewed theories provide sound bases for the development of a set of synthesizing constructs to underpin an overarching framework for examining and thinking about opportunity construction. The theories' discordant elements enable us to bound the framework and specify the kind of opportunity construction it serves to examine.

The constructs (see Table 8 and Figure 1) synthesized from the shared elements of the reviewed theories include: flexible goals, reenactment of resources, network transformation, and leveraging of emergent contingencies. Each of these constructs is itself a reframing and elaboration of the shared elements already discussed.

The discordant elements already examined – locus of action and degree of novelty – have implications for determining which situations and processes the proposed synthetic framework is more relevant to.

Table 8 – Constructs of the synthetic framework for opportunity construction and their basis in shared elements of relevant extant theories.

Synthetic construct	Shared element of extant theories
Flexible goals	Focus on means
Reenacting resources	Reframing resources
Transforming networks	Forging networks
Leveraging contingencies	Spontaneous action

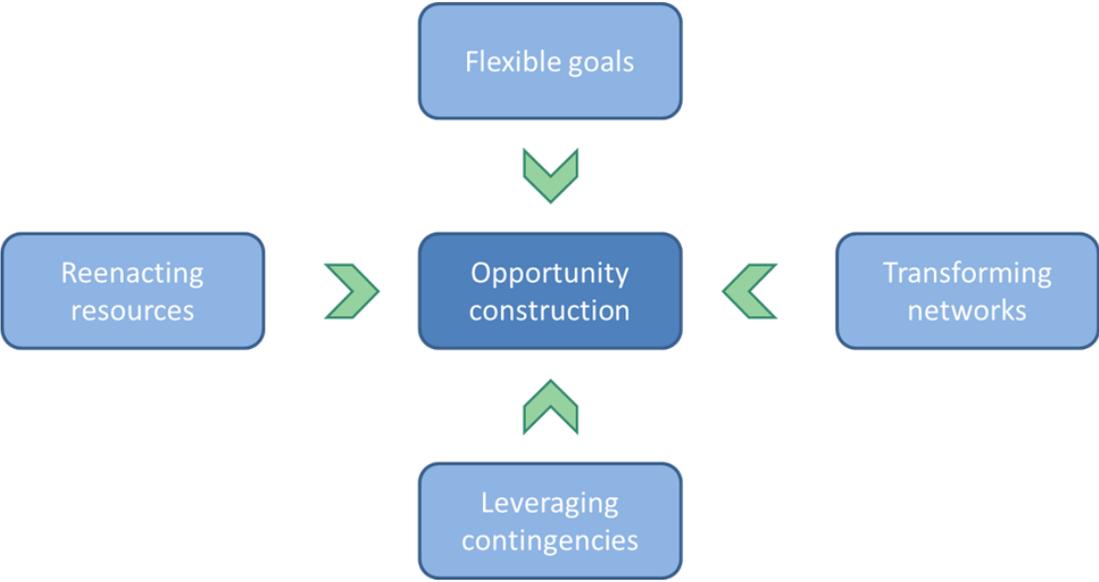


Figure 1 – Synthetic framework for opportunity construction processes.

In the following subsections I describe each synthetic construct, point out any differences or elaborations it may have over the shared element it was derived from, and contrast the construct to what usually occurs when an opportunity discovery logic is applied. In the subsection on construct agreement I use a

vignette to demonstrate how these four constructs interact and counterbalance each other in the framework. Lastly, I end with a subsection on limitations that explains the implications of the discordant elements of opportunity construction theories on the synthetic framework.

Flexible goals

Opportunity discovery models focus on first clearly identifying and delimiting an opportunity. This naturally becomes a clear goal to be aimed for. The entrepreneur then gathers and configures the resources considered necessary to exploit the opportunity and achieve the objectified goal.

With goal flexibility – meaning that the entrepreneur’s goal is not rigidly defined from the outset – opportunity construction models maintain plasticity regarding the means that have to be assembled or how they have to be deployed. The goal can be kept generic and broad, such as “the generalized aspiration of building a successful business of her own” (Sarasvathy, 2001), or it can be framed in deliberately equivocal terms such as “let’s change the flow,” “develop a ‘\$1,000 copier’ based on a totally new concept,” “make an excellent company by transcending the camera business,” or “create human electronics” (Nonaka & Takeuchi, 1995). An alternative way of maintaining goal flexibility, especially in cases where the resources are clearly defined (for example when a salesperson is tasked with selling cars), is to be willing to add complexity to the outcome or recast it in broader terms. In the case of the car salesperson, the goal could be broadened by recasting her job as providing clients with comprehensive and customized mobility solutions, thus enabling the use of many alternate resources and options such as leasing, service plans, extended warranties, trade-ins, rentals, etc.

I propose the construct of goal flexibility goals rather than a focus on means or the conflation of means and ends (as many of the theories frame the issue), simply because it is easier to grasp. Rather than having to juggle two interplaying concepts (ends and means) within a single construct, a focus only on ends makes for a cleaner logic. It also helps avoid some of the confusion that can be sown by trying to think of means as ends. Let's take for example a gardener with a spade. If we say that ends and means are conflated, we could be implying that the spade is or could become part of the gardener's goal. This doesn't make much sense, at least in most gardeners' cases. If we posit goal flexibility instead, then the spade can comfortably remain a means. In this case, the question becomes, what will the gardener use the spade for? Or what can a gardener create or do with a spade? Loading all the uncertainty onto the goal still agrees with the underlying logic from the reviewed theories. An important property of goal flexibility as a construct is that it is applicable to groups of interacting individuals and collectives, not only individual entrepreneurs. Goals can be ambiguous or plastic for a group even when each member has clear goals because it is unclear how the members' goals will interact and what the interaction will produce. On the other hand, if each member has flexible goals, the collective's goals will also be flexible. Also, each member does not have to have individualized goals for collective goal flexibility to hold, they simply have to be vague about the group-level goals.

Reenacting resources

Opportunity discovery models assume resources are objective and have clear and pre-defined purposes; to pursue an opportunity, an entrepreneur needs to first acquire and deploy the appropriate resources. Opportunity construction

theories recognize that resources can be used in many ways and that no two firms or individuals will create the same effect from the same resources. Furthermore, they posit that synthetic skills can be deployed to actively construct new resources or create new uses for existing ones.

I use the term enacting rather than framing to emphasize the notion that resources are really only tangible and existent when they are in actual use. If a resource is not being actively used, deployed, or considered – in other words, enacted – then it doesn't make sense to classify it as a resource in opportunity construction logic. I add re to the term to denote that in opportunity construction processes the resources may be enacted in ways that are different than the more conventional ways they would be when following an opportunity discovery logic.

The term “enactment” also brings to mind the idea of social construction (Berger & Luckman, 1967). Baker and Nelson (2005) continually reference it while discussing bricolage to make the case that resources are not necessarily objective features of the environment. But their focus on the individual bricoleur detracts from the social aspect of construction. A socially constructed artifact is something that has become objectified by shared experience and then been incorporated into a sign system (language) (Berger & Luckman, 1967). Part of the reason bricolage is so unstable is that often only the bricoleur is capable of reframing the resource and maintaining its new function. In the present framework, reenacting is meant to connote that the construction of resources can be a shared activity (and is more potent when it is) – resources are reenacted when all the participants involved tend to agree on what the synthesized resource actually is or understand its function within their activity.

Network transformation

In opportunity discovery processes, networks are usually used instrumentally in one of three ways:

- Entrepreneurs use their networks to search for the opportunities; they use them as extended environmental sensing organs. Many entrepreneurs actively “network”, deliberately increasing the size of their network in search of opportunities.
- Actors in an entrepreneur’s network are seen as resources that need to be deployed to exploit an opportunity. Thus an entrepreneur founding a trucking enterprise may scan his network for licensed commercial drivers he may hire.
- Lastly, entrepreneurs may search for and exploit opportunities within their networks. In Burt’s (1995) theory of structural holes and social capital, an entrepreneur is the individual who brokers a relationship between two previously disconnected players and then continues to control the information flow between them in order to benefit from the added value created by the new relationship.

The artifacts that result from opportunity construction are the products of nurturing the growth of social networks and leveraging them as needed. In many cases, the nature of existing relationships is transformed or augmented to allow different kinds of transactions: for example, a friend may be converted into a lead user (von Hippel, 2005). The networks may also be enlarged in the process of creating a new artifact. In the synthetic framework for opportunity construction, network transformation encompasses both processes: repurposing existing relationships and adding new actors to the network.

Leveraging contingencies

Opportunity discovery models emphasize the need to plan and to stabilize the environment. If conditions shift as resources are being deployed, the targeted opportunity may vanish before it can be exploited. Alternatively, the opportunity may change and require a regrouping and redeployment of resources.

Opportunity construction processes retain flexibility so that emergent contingencies may be dealt with as they arise and ideally be fluidly incorporated into the processes. Leveraging contingencies moves beyond simple spontaneous reactions to circumstances, which is the common denominator of the reviewed theories, to include a positive and constructive approach to unforeseen events. When constructing an opportunity, the entrepreneur strives to make use of unanticipated eventualities rather than avoid them or overcome them. This posture is captured by the idiom “When life hands you lemons, you make lemonade.”

Construct agreement

The four proposed constructs (see Table 8 and Figure 1) complement and balance each other in a framework for opportunity construction. They can be seen as elements of a simultaneous equation or pairings of abductor and adductor muscles. The following hypothetical example highlights the interplay between them.

Imagine the owner of a motorized yacht who wants to start a business. At first, he is not certain what specific business he'd like to start, other than it be related to the ocean and the use of his boat; his initial goal is ambiguous. As he is pondering – over a drink at the marina's bar – whether to invest in rods

and reels in order to offer fishing charters or to become certified as a dive master so that he can take people scuba diving (the two main tourist industries in the marina), he overhears another patron asking the bartender which is the best outlook in the area for watching the sunset. He instinctively leans over to the inquiring patron and asks, “Have you ever seen a green flash³?”

They then fall into a conversation and our entrepreneur discovers that the tourist is an avid sunset photographer, and is now really excited to try and capture a green flash on film. The yacht owner agrees to take the photographer out to sea at sunset, away from the city’s smog to increase his chance of photographing a green flash in return for picking up the bar tab and covering the outing’s fuel cost. On their way to the marina, the entrepreneur calls his friend, who is a local portrait photographer, and invites her to join them. She jumps at the offer and meets them at the marina an hour before sunset.

The trio heads out and is so lucky that they actually manage to photograph a green ray, the first time this phenomenon has ever been photographed in the area. Upon their return, the tourist is so excited that he e-mails his photography club back home and begins to organize a group trip with the specific intent of photographing green flashes. He naturally asks the yacht owner if he would host the group on his “lucky” boat. The entrepreneur glances at his photographer friend, who encourages him to accept and offers to help set up the boat so that it may accommodate a group of photographers.

³ Green flashes and green rays are optical phenomena that occur shortly after sunset, when a green spot becomes visible above the sun for a second or two, or a green ray shoots up from the sunset point. Green flashes/rays are rare, as they depend on a specific confluence of atmospheric conditions, and they require an unobstructed view of the horizon.

The tourist returns two weeks later with his photography club friends, and this time they pay charter rates for using the boat. They don't get to see a green ray, but they do manage to photograph a small green flash after several outings. They are also treated to a pod of photogenic dolphins and some jumping mobula rays. They return happy to their homes and post their pictures on the club website. The photographer subsequently realizes that there is an intense online interest in the green flash pictures his club members have posted to the site and calls the yacht owner to let him know. As they discuss this, it slowly dawns on the yacht owner that he could begin to create a niche in "green flash" and photography charters. Simultaneously, the photographer realizes he could earn some money on the side by promoting and organizing trips of photography aficionados to try and capture the elusive green flash. Before they know it, the yacht owner has hired his portrait photographer friend full time as a deck hand, and is offering "green flash cruises" that are being populated by the now famous website "green flash photography", managed by the photographer.

This example shows how the different elements of opportunity construction processes enable and reinforce each other. For example, the yacht is obviously a potential resource, but it can be used – or reenacted – in a number of ways. Traditionally, yachts in the locality have been used commercially for sport fishing and scuba diving. They could be used for a myriad other purposes, from hosting cocktail parties to serving as libraries. In this case, because the owner did not have a defined goal, he was able to recast it as a photography platform. His enactment of the resource was also tightly linked to transforming his network, and leveraging contingencies. Using the boat for photography enabled him to establish a new relationship with the

photographer and let him change the nature of his relationship with the portrait photographer from friend, to employee. Reenacting the yacht as a photography platform was crucial for leveraging a chance encounter with a visiting tourist into the seed of a business. Other resources which weren't resources until they were reenacted as such include the sunsets and the local sea life. The yacht owner's goal flexibility was also related to the leveraging of contingencies, namely, the encounter with the photographer and mutual interest in green flashes. Had the yacht owner's pre-defined goal been to offer fishing charters, he would not have engaged the photographer or offered his yacht as a photography platform.

Table 9 describes some instances of each of the synthetic constructs in the vignette and Table 10 is a matrix that shows instances of how each pair of synthetic constructs interacts in the vignette – from the perspective of the yacht owner.

Table 9 – Instances of the synthetic constructs in the green flash vignette.

Synthetic construct	Instances in vignette
Goal flexibility	<ul style="list-style-type: none"> -Yacht owner is not sure what kind of business he'd like to start -Photographer doesn't even know about green flashes
Reenacting resources	<ul style="list-style-type: none"> -The yacht is used as a photography platform -The tourist uses his photography club as a source of clients
Network transformation	<ul style="list-style-type: none"> -Yacht owner and photographer become business associates -Friend of yacht owner gets converted into employee
Leveraging contingency	<ul style="list-style-type: none"> -Yacht owner and tourist use chance encounter to start activities that lead to the creation of the business -Tourist harnesses the unexpected popularity of green flash photos posted by his club members on their website to create a customer stream

Table 10 – Interactions between synthetic constructs in green flash vignette.

Synthetic construct	<i>Reenacting resources</i>	<i>Network transformation</i>	<i>Leveraging contingency</i>
<i>Goal flexibility</i>	Non-focus on diving services allowed yacht owner to reframe sunsets as a client attractor	Openness to different outcomes enabled the yacht owner to start a business that relied on a photographer he had just met	Not being wedded to fishing charters, the yacht owner was able to harness a chance encounter and mutual interest in green flashes
<i>Reenacting resources</i>		Reframing sunsets as photo ops enabled the yachtman to create a new network amongst photographers that served as clients	Reframing the yacht as a photography platform let the yacht owner use a random conversation on green flashes as the basis for offering a unique service
<i>Network transformation</i>			The new relationship with the photographer enabled the yacht owner to tap into the unfor-seeable interest in green flash photography

Boundary conditions

The discordant elements of the reviewed opportunity construction theories have some implications for the synthetic framework. As we saw, some of the theories posit an individual as the driving force behind opportunity construction processes while others claim it is more of a collective process. The theories also disagree on the extent to which opportunity creation processes will produce novel outcomes; some of them put upper bounds on the potential novelty of the outcomes by stressing path dependency or incorporating constraints to the creation of value while others do not limit the potential novelty. Table 11 describes the implications of these discordant elements.

Table 11 – Implications of the discordant elements of extant theories for the synthetic framework for opportunity construction.

Discordant element of extant theories	Implication for synthetic framework
Locus of action / Driving agent	Focus on collective interaction and on the entrepreneur's role as a facilitator
Degree of novelty	Focus on processes that are not bounded by the level of potential value they may create

The synthetic framework has been abstracted to the point that it can consider opportunity construction processes as either driven by an individual agent, or as the product of interacting individuals. In the analysis of the vignette presented in the previous subsection (see Table 10), the framework is used to examine the creation of Green Flash Cruises as if the yacht owner had “driven” the process. The interactions of the elements described in Table 10 are described from his perspective. But it should be obvious from reading the vignette itself, that the artifacts were created by the social interaction of several individuals. In this case, the participation of the photographer/tourist is almost as important as the yachtsman’s in order to concretize the opportunity. Viewing the acts of entrepreneurship and of opportunity construction as pertaining to a focal agent might make for convenient theorizing – most westerners naturally think in terms of individuals with their own volition and freedom of choice – but runs the risk of overlooking important elements of the process and lots of its relevant richness. The synthetic framework does enable us posit a more distributed locus of action. In the vignette, we can see how the photographer, as well as the yachtsman, was flexible about his goals, reenacted resources, leveraged unforeseen events, and transformed his

networks. Alternatively, we can apply the constructs at a higher level of analysis and examine how the yachtsman and the photographer together maintained flexible goals, reenacted resources, leveraged contingencies, and transformed networks.

If we still want to think of particular individuals as driving the process, it may make more sense to think of entrepreneurs as those who facilitate these open-ended processes in which several actors interact with the broad goal of creating a new artifact by reframing resources and leveraging contingencies. This conceptualization of the entrepreneur is broadly analogous to Lester and Piore's (2004) cocktail party host, or Nonaka and Takeuchi's (1995) knowledge engineer.

Regarding the degree of novelty that may be produced, the synthetic framework does not suggest an upper boundary because it does not include the constraints on the potential value of the resulting construct that bricolage, reflective practice, and improvisation do. Drawing again on the Green Flash vignette, there is no inherent factor that would limit the degree of newness-to-the-world of the outcome, nor the potential value it could produce. The Green Flash business is not inherently unstable (only operable by the original yachtsman), intrinsically incapable of being scaled, or congenitally unable to impact more than a single individual or case. Also, the framework does not favor path dependency over path creation.

Opportunity discovery vs. opportunity construction logic

Opportunity construction processes many times appear to be opportunistic, aimless, poorly motivated, and unstructured. This may not concur with how most of us perceive reality; we hold the attainment of goals very close to heart

and assume that goal-oriented action (Austin & Vancouver, 1996) is the bedrock of human behavior. To the Western mind, the intentional individual is the ultimate building block of society. The idea of autonomous individuals acting in their self-interest has been the basic organizing principle of modernity and modern capitalism. In this Aristotelian, Cartesian, and consequentialist theology, action is invariably seen as choice, and choice is driven by anticipations, incentives, and desires (Berlin, 1997; March, 2003; Chia, 2003; de Rond & Thietart, 2007).

Clarity of goals and purposive action are inherent to the opportunity discovery logic and agree with the strategic choice and planning school streams in strategic management that emphasize the importance of systematic analysis and integrative planning (Ansoff, 1979, Porter, 1980, Mintzberg, Ahlstrand, & Lampel, 2005; de Rond & Thietart, 2007).

In their development of the interpretive process perspective, Lester and Piore illustrate how engineers are deliberately trained to think and behave in terms of goals. In their words:

“Would-be practitioners learn to begin by making a sharp distinction between ends and means - between the goal they are trying to achieve and the resources available for achieving it. Their next step is to specify a causal model connecting the means to the ends. Finally they optimize – that is, to solve the causal model so as to maximize the degree to which the goal is achieved, given the constraints on resources. When there are multiple, possibly conflicting goals, they are taught to identify trade-offs among them and to look for solutions that achieve acceptable performance with regard to each goal at minimum cost.” (Lester & Piore, 2004)

An opportunity discovery stance towards launching new businesses typically leads to the kind of information gathering and analysis activities described in the introduction for most firms expanding to new geographies. The individual who believes in pre-existing opportunities typically takes the traditional “environment scanning ► opportunity recognition ► resource configuration ► resource deployment ► business launch” approach to initiating a new venture. The opportunity construction mindset, on the other hand, agrees much more with an Eastern mindset which is essentially pragmatic and existential (Chia, 2003). In this view, the world is experienced as of the actors and is not viewed as an external object to be apprehended (Nonaka & Konno, 1998); it is recognized that that which is changing cannot be given a stable identity and thus cannot be located in a system of causal relationships (Nonaka, Toyama, & Hirata, 2008). Action in the world is perfected through direct and unmediated involvement. James (1912) called for a radical empiricism, arguing that knowing, spontaneous action, and inspired performances are the result of being open to ‘pure experience’ – which occurs before conscious thought intervenes and separates subject from object. In the extreme version, there isn’t an assumption that the self exists before experience; the self is realized through the act of experiencing – the individual is not an *a priori* entity but an emergent property of experience itself (Nishida, 1921).

Thus, individuals who believe they create opportunities are much more likely to take action within the environment from the start, before trying to garner resources or configure their resource bases. The process will be much more iterative, will likely start small, and be much more experimental. In the extreme, these entrepreneurs will be willing to try almost anything that's legal to get their first sales of whatever they can get ahold of to sell.

CHAPTER 4

RESEARCH STRATEGY

The primary thrust of this dissertation is to develop theory that helps us understand how firms create novel businesses in new market space. From a methodological perspective, the main conundrum is how to develop a deep understanding of a phenomenon that is inherently non-linear, unstable, and ephemeral. In a sense, studying processes that are not routine and are intended to produce unique outcomes is akin to the biologists' examination of the emergence of life. Evolutionary theory can explain and provide methodological guidance for studying how life forms change over time, but it has little to say about how life originally emerged. Similarly, research methods designed to study existing organizations and stable organizational routines may not be appropriate for learning about chaotic and unpredictable founding processes. In fact, conventional or "variance" research approaches can drive researchers to "sample on the dependent variable" in these conditions (Van de Ven & Poole, 2005).

For example, each year four to six percent of the working population of the United States take action to start new ventures, less than half succeed, and fewer than one in ten of these entrepreneurs are able to make their organizations grow significantly (Duncan & Handler, 1994; Reynolds & White, 1997). Thus, methods that favor the examination of existing or fully formed organizations may divert our attention from the "nascent entrepreneurial" processes and the "organizational fermentation simmering just below the surface of society" (Aldrich & Martinez, 2001), which in the case of this dissertation, are the very processes of interest.

From the critical realist and positivist perspectives, quantitative research methods are considered to offer understandings that are more reliable and valid (Cook & Campbell, 1979; Bhaskar, 1998). But these methods require numerical data, which implies measurement, and measurement requires a base level of convention, as well as a certain phenomenological stability or repetitiveness. Emergence and non-routine processes that have unique outcomes are very difficult if not impossible to measure, and there is little agreement on how they can be measured. Thus, the research strategy crafted to answer this dissertation's question is a "qualitative" and "process" based one – one based on words and on explaining the sequence of events in time and context (Miles & Huberman, 1984; Van de Ven & Pool, 2005). It is an approach that relies heavily on ethnographic practice but also draws from case study analysis and action research methodologies. While these approaches may be based in different epistemologies, it is precisely the combination of multiple epistemologies which is intended to drive the production of creative theory (Kilduff, Mehra, & Dunn, 2011; Suddaby, Hardy, & Huy, 2011).

EPISTEMOLOGICAL STANCE

Epistemology refers to the rationale whereby a researcher makes and assesses "truth" claims. Mainstream organizational research is mostly based on a realist perspective –one that assumes that causal relationships exist beyond the human mind and that scientific theories provide approximately true descriptions of the world (Cook & Campbell, 1979; Putnam, 1987). These theories replace each other over time as they provide better accounts of phenomena, and can be evaluated rationally in terms of how well they explain the phenomena (Kilduff, Mehra, & Dunn, 2011).

An alternative epistemology in organizational research can be broadly construed as phenomenology or social constructionism (Berger & Luckman, 1967; Van Manen, 1990). Within this line of thought, the social world is a continuous process that is constructed anew in each social encounter, as individuals build shared meanings. A social construct is thus a concept or practice that is the artifact of a particular group of people, and its persistence and meaning is contingent on it being constantly maintained and reproduced by them; social constructs (e.g. good and evil) cannot be separated from the societies or groups that bring them about. In Morgan and Smircich's (1980) words, "the realm of social affairs has no concrete status of any kind; it is a symbolic construction".

The use of qualitative methods tends to agree more with a social constructionist perspective. Social constructionists recognize that knowledge is situated; it belongs to the social situation that produces it, and may be irrelevant or meaningless when abstracted from the context. This is one of the main differences with realist perspectives that ultimately assume that knowledge can be abstracted, and that results are generalizable across situations – given that certain conditions hold. Realists believe that the problem of induction can be at least partially solved (Hume, 1888; Ketokivi & Mantere, 2010). In a quest for positivistic validity and reliability, some methodologists strive to apply the "rigor" of quantitative methods to qualitative ones. Thus, Miles and Huberman (1984) argue for a "transcendental realism" whereby theory that accounts for real world phenomena is built from the careful analysis of qualitative data. Eisenhardt (1989a) structures her method for analyzing cases in a manner analogous to quantitative methods; in Eisenhardt and Graebner's (2007) words, "each case serves as a distinct

experiment that stands on its own as an analytic unit”.

My selection of research methods was not contingent on the adoption of either one of these epistemological stances, but on the desire to produce an understanding of the situation that is the most practical. For this, I borrow from the action research, pragmatic, and instrumentalist perspectives that assert that knowledge should be judged in terms of how useful it is (James, 1912; Laudan, 1977; Susman, 1983). In Mintzberg’s words:

“All theories are false, because all abstract from data and simplify the world they purport to describe. Our choice, then, is not between true and false theories so much as between more and less useful theories.”

(Mintzberg, 1979)

To generate a useful theory about how firms build novel businesses in new market space – where processes are unstable and of relatively short duration, and there is little agreement on what can and should be measured – the most appropriate method is a blend of ethnography and action research that enables “disciplined imagination” (Weick, 1989).

ETHNOGRAPHY AND PARTICIPANT OBSERVATION

I used mostly participant observation for gathering data and building theory. It is very similar to the “participant observer” mode of ethnography that is the most commonly used and legitimate variant in organizational studies (Van Maanen, 1979a). Most importantly, I spent considerable amounts of time participating directly in each of the described cases – this is the essential practice of ethnography (Reeves Sanday, 1979). Where I diverged from conventional ethnography was in that besides being an observer, I had a functional role in both cases I studied.

Ethnographers, although they strive to participate in “everyday life” and understand reality from the perspective of their subjects (Reeves Sanday, 1979), never truly lose their status of observers or outsiders because they do not have a traditional role nor a long term commitment to the setting or society they are studying – they are not fathers, chiefs, or bosses. Venkatesh’s (2008) experience with Chicago inner-city gangs illustrates this point. Even after “hanging out” with a gang for seven years, Venkatesh was never able to be fully accepted as “one of them” nor permitted to view many of the behaviors that were of interest to him. Towards the end of his study, he finally became “a gang leader for a day” and had to actually commit crimes and perpetrate acts of violence; he had to abandon his detached researcher personae in order to gain full access and a closer emic perspective. This exquisitely illustrates the dilemma an ethnographer faces in trying to balance participation and observation. In reality, most participant observation in organizational settings is composed mainly of observation and interviews. Participation is usually delegated to trying out a few peripheral tasks (e.g. using a microscope in a laboratory, or cleaning a latrine), not actively participating in the decision-making that is locally considered important. The village chief does not usually ask the visiting ethnographer’s opinion on who he should marry his daughter off to, and the CEO does not invite the researcher to actively participate in a board meeting and debate strategic direction. A more accurate term for the strain of participant observation practiced in the study of organizations might be “embedded observation”.

In my study, I was by design an active participant; I had significant roles to play in each of the cases, and therefore commitments and responsibilities to the local actors that were independent of my research requirements. This

almost completely eliminated my “outsiderness” or “third person on a date” quality; I was not the unobtrusive and taken-for-granted “fly on the wall”, but an actual boss, adviser, or employee. The price paid for this could be seen as a loss of “objectivity”, or of “going native”. Yet it is not clear that active participation, in and of itself, is a greater threat to the generation of solid theory than the ethnographer’s eternal dilemma of trying to maintain a third party’s view while simultaneously understanding the emic perspective (Reeves Sanday, 1979).

The main hazard of active participation was the lack of time and energy it left for disciplined note-taking, reflection, and on-site text analysis. Most ethnographers spend the majority of their time taking field notes, which they ideally transcribe and pre-analyze on the same day. Active participation in high-intensity entrepreneurial processes left little time for detached note-taking, and even less time for quiet in-field analysis. My typical day in the field started early in the morning and often ended past midnight, with the great majority of the time spent participating and immersed in the business creation activities. Fortunately, my role in each case was in part to be a kind of evaluator, trainer, and facilitator, so a great deal of the direct activities and outputs of my participation were directly aligned with my research requirements. For example, at the end of each workday in the field I would facilitate a debriefing session in which the field team would reflect on the day’s activities and revisit its short and long term action plans. On another occasion, I spent an entire day debriefing field team members after their home stay experiences.

While active participation may have decreased the amount of time for personal note-taking and in-field reflection, a formal and legitimate role provided access

to an enormous reservoir of archival data that was generated during the processes. To buttress my field notes, I had access to all sorts of internal documents; including more than 2,000 searchable e-mails for each of the cases that nicely tracked their development (see the Data Collection section for more detail). The wealth of archival data that was generated during the processes and which was available to me as a participant, enabled triangulation of data to solidify or discard my own observations as well as partially postponing analysis to when I was not in the field or the observation/participation periods had ended. I also developed much closer relationships with the studies' subjects through shared experience; I was "an insider". This provided access to all kinds of behaviors and actions that would normally be shielded from an observer.

The other main reason for structuring a more participative role was to sidestep some of traditional ethnography's built-in constraints. Ethnography is a methodology for researching and learning about cultures – established and, self-reproducing systems of meanings (Van Maanen, 1979b; Reeves Sanday, 1979). Ethnographers automatically assume that cultures are relatively permanent artifacts (at least more perdurable than their study period) composed of repetitive, routine, and structural elements – from the traditional ways in which power is distributed within a household to the intricacies of language. When ethnography is used to study organizational life, it is naturally assumed that there is an equivalent of a culture to be studied; that is, a relatively stable set of self-reproducing structures that the ethnographer will learn about (Smircich, 1983). Thus Van Maanen (1975a) studied how job attitudes of police recruits evolved over time, Howard-Grenville (2005) studied organizational routines in a high-tech manufacturing organization, and Barley

(1986) looked at how new medical imaging devices challenged the traditional role relations among radiologists and radiological technologists.

But the assumptions underlying this methodological stance do not apply cleanly to the phenomena of interest to me. My intent was not study a culture or a stable set of institutionalized roles and relationships, my goal was to understand a phenomenon that is ephemeral, unstable, unplanned, non-linear, and relatively unstructured. In real life, this meant that there wasn't a radiology room, police department, or high tech manufacturing plant I could go "hang out" at and unobtrusively observe how its delimited set of actors operated in a routine manner. I had to find a way to be "present" in a process that occurs across geographical boundaries, with a shifting group of actors, and in an unpredictable manner. The way to do so was to be involved and relevant to the process.

To summarize, a more participative version of ethnography allowed me to: (1) get a much deeper access and understanding of the phenomenon, and (2) fully examine a non-linear and relatively unstructured process that takes place across locations, actors, and time.

SAMPLE SELECTION

The cases I studied were not chosen randomly; they were selected for "theoretical" reasons (Eisenhardt & Graebner, 2007); they were suitable for exploring a particular phenomenon and illuminating and extending relationships and logic among relevant constructs. At the core, these were two initiatives that addressed my research question spot-on; they were explicitly launched by firms to create novel businesses in new market space. A very important element in their selection was the fact that they enabled me to

observe the phenomenon from its very inception, and thus avoid “sampling on the dependent variable” or missing out on the early “effervescence” (Aldrich & Martinez, 2001). While single-case studies can richly describe the existence of a phenomenon (Siggelkow, 2007), multiple case studies typically provide a stronger base for theory building (Yin, 1994). Given the ethnographical nature of the data collection, two cases were the maximum that could be done within the scope of this dissertation. However, most ethnographical studies are single cases (e.g. Gudeman, 1986); showing the emergence of the phenomenon in such detail in two separate cases greatly strengthens the resulting theory.

Pre-identifying these kinds of cases and then getting full access to them in real time is one of the great barriers to this kind of research. The vehicle that allowed me to gain full access to these initiatives at their inception was the BOP Protocol (Simanis et al., 2008), a process-based framework for co-creating innovative businesses in close partnership with low-income communities. Both firms decided from the start to use this framework to guide their business development initiatives. As a coauthor of the BOP Protocol, I was invited to participate in the processes.

The use of the BOP Protocol injected some methodological kinks into sample selection and theory induction. At first glance, the use of a particular business development methodology would appear to “pollute” the sample; any theory developed would not be applicable beyond firms that decided to use the BOP Protocol, and were able to apply it consistently.

The central thrusts of the BOP Protocol are the generation of mutual value, and the use of co-creative techniques as drivers of innovation and the social embeddedness of the resulting business. In broad terms, the main effect of employing the BOP Protocol is the deployment of field teams to immerse

themselves in the target communities in order to be able to co-create businesses that are mutually beneficial. In appreciation of the differences in contexts and implementing firms – and the open-endedness of creative processes – the BOP Protocol is very vague in its instructions for actual behavior in the field or even within the firm; it is not a field guide or a manual. Thus, the actual business creation processes in the field tend to be shaped primarily by the “structure” of the situation – a field team immersed in a foreign environment trying to create a novel business that is locally accepted while trying to communicate its experience to its superiors.

This basic dynamic, which forms the core of the resulting theory of entrepreneurial sensemaking, is generally applicable to cases that show the same basic structural elements, regardless of whether they are following the BOP Protocol or not; that is, the theory is useful for cases when firms attempt to build novel businesses in new market space by deploying field teams to do so.

In fact, the Discussion Chapter suggests that sampling based on the use of the BOP Protocol actually created a strong test of the theory. By using the BOP Protocol and openly acknowledging that they were deploying field teams to create novel businesses, senior managers at ACB and SCJ were initially assumed to be quite goal flexible and intent on “constructing” opportunities. But the fact that we observe different corporate echelons enacting distinct opportunity mindsets (rather than all espousing the single logic implicit in the BOP Protocol) suggests that firms that do not use the BOP Protocol are even more likely to develop this tension and subsequently undergo the sensemaking process.

At the end of the day, selecting the sample based on firms implementing the

BOP Protocol was an overall strength of the study because it ensured that the firms would deliberately attempt to create novel businesses, allot significant resources to the task, deploy field teams to immerse themselves in the local environment, and allow me deep access from the outset.

DATA COLLECTION

As a research project leader, I was fully immersed in the initiatives and an important decision-maker in the processes. I participated in a diversity of business creation activities and practices such as: human resource management (selecting, hiring, firing team members), producing and managing budgets, personnel training and oversight, work plan design and implementation, prototype design and deployment, sales fieldwork, customer acquisition, milestone setting and evaluation, report writing, organizational design, strategy setting, organizational partner selection and management, grant preparation, field team management, site selection, homestays, in-field market research, fund raising, accounting, record keeping, training manual development, financial projections and analysis, business plan development, etc.

In the course of this work, I interacted with actors from all levels of the processes, including: prospective and actual customers, community leaders, NGO personnel, field-level employees, middle managers, senior managers, R&D specialists, government ministers and representatives, consultants, boards of directors, suppliers, funders, etc. I developed deep and lasting relationships with the key players, especially the field managers (whom I hired or helped hire) and each initiative's key corporate driver or backer.

I visited each field site on numerous occasions, spending a total of more than

nine months in the field across the three sites. Furthermore, I participated in managing and monitoring the businesses from afar (the US) in a consistent manner, participating in weekly management conference calls, e-mail discussions, and innumerable one-on-one conversations, meetings, and calls. I participated in the ACB case, as a functional member of the initiative for twelve months. I led or co-led the SCJ initiative for eighteen months.

The primary means of data collection was personal, first-hand observation. This was supplemented by access to a wealth of archival data sources, informant reports, and interviews. The most important source of data beyond the field notes and write-ups derived from first-hand observation were the e-mail conversations I was part of during the study periods. In each case, I generated searchable e-mail databases with over two thousand e-mails each. The e-mails were related to all the business creation activities mentioned above. The stream of documents that were created as a natural outcome of creating a business were the third most important source of data for analysis, triangulation, and confirmation. These documents ranged from transcripts of conference calls and presentation slides to personal essays about homestays and financial projections. I reviewed more than 800 documents per case. Table 12 provides a summarized list of types of archival data sources and Table 13 provides a more detailed list.

An important non-verbal data source was a database of videos, photos, and recordings I made for each case – with hundreds of photos per case. Lastly, I conducted “exit” and “post-event” interviews with several of the most important players to gain their reflections and *ex post* perspectives on the events and processes.

Table 12 – Summary list of types of data sources.

Source	Medium
Personal field notes	Written
Internal conference calls	Written notes, audio recordings
Internal meeting notes and materials	Written, audiovisual
Community meeting notes and materials	Written, audiovisual, photographic
Internal presentations	Written, audiovisual
Presentations to external stakeholders	Written, audiovisual
Interviews	Written, audio recordings
Internal documents (work plans, meeting minutes, white papers, budgets, project evaluations, etc.)	Written
E-mail communications	Written

Table 13 – Detailed examples of types of archival data sources.

Meetings	Reports	Plans	Evaluations	Others
Agendas	Assessment reports	Action plans	Consultant's reports	Case studies
Briefing notes	Brainstorm results	Business plans	Interview assessments	Communication flow charts
Conference. call recordings	External presentations	Financial projections	Metric & criteria lists	Contact lists
Conference call transcripts	Financial reports	Grant proposals	Performance evaluations	Contracts
Minutes	Field trip report backs	Operational budgets	Site visit evaluations	Costing/pricing tools
Notes from calls	Focus group reports	Project budgets	Third party evaluations	E-mails
PowerPoint slides	Focus group transcripts	Road maps		Expense sheets
Workshop flipcharts	Internal presentations	Task lists		Fact sheets
Workshop photos	Journal entries	Timelines		FAQ lists
	Operational reports	To do lists		Feedback documents
	Personal essays			Invoices
	Personal notes			Job descriptions
	Progress reports			Marketing materials
	Survey results			Mission/vision statements
	Weekly updates			MOUs
				Organizational charts
				Price & cost lists
				Product lists
				Recruitment process documents
				Statements of interest, CVs
				Training manuals

DATA ANALYSIS

Van de Ven and Poole affirm:

“Process theories may incorporate several different types of effects into their explanations, including critical events and turning points, contextual influence, formative patterns that give overall direction to the change, and causal factors that influence the sequencing of events” (Van de Ven & Poole, 2005)

In order to develop a process theory of entrepreneurial action, my main effort of “data reduction” (Miles & Huberman, 1984) was to write a “thick description” of each of the cases in which I took thousands of pages of field notes, e-mails, and corporate documents and weaved them into two narratives that highlighted the social processes that are distinct to the ventures and relevant to the research question.

Cognizant of Van Maanen’s (1979a) observation that “we tend to theorize well in advance of our facts” I did not start writing the thick descriptions with a set of hypotheses in mind, but with a more open perspective to allow the themes present in the situation to emerge (Smircich, 1983). This “openness” stance was also maintained during the field work (as pre-analysis inevitably occurs at that point). In order to participate fully in the processes, the stance I took in the field could not be one of questioning absolutely every assumption about how reality is perceived, as Latour and Woolgar (1979) do when examining the functioning of a scientific laboratory. I did share a basic set of tacit assumptions and understandings with the rest of the participants, but in general, the nature of the phenomenon was so new to everyone involved, that the emergent elements of interest could be readily questioned, and even examined in a collective manner (Van de Ven & Johnson, 2006a). For

example, because of the involvement of community members and not-for-profit partners in the processes, basic questions about the structure and nature of businesses (who should benefit, what's the main purpose) which are usually taken-for-granted in conventional start-ups were continually debated and questioned.

The bases for each of the thick descriptions are timelines that chronicle the major activities and events related to creating and launching the businesses. These timelines are complemented by depictions of the firm personnel involved (at different organizational levels and at different times) in the processes, as well as characterizations of other key actors (e.g. consultants, customers, local partners, etc.). The descriptions of these actors include their roles, the extent and nature of their involvement, the level and kinds of decision-making they were engaged in, and how their relationships with other actors evolved over time.

The writing of the final thick descriptions was an iterative process, with several versions being written and sharpened as I "interrogated" them. These thick descriptions and the process of writing them served as building blocks for grounded theory generation – an approach (not really a specific technique or method) that emphasizes the situational and structural contexts and requires a detailed, intensive, microscopic examination of a corpus of data in order to bring out its complexity (Corbin & Strauss, 2007). Successively evolving interpretations of the data were guided by my technical and personal experience (Corbin & Strauss, 2007), but also by simultaneously reviewing the relevant literature. I iterated between the cases and extant theories until a particular way of framing the cases resonated deeply with my experience and with the literature. I then sharpened the cases to highlight dimensions relevant

to the research question in relation to literature.

As I rewrote the cases, I double checked to ensure that newer versions remained concordant with all the data sources, consistently triangulating between them. As the cases cohered, drafts were then reviewed by key actors (Yin, 1994). A rule of thumb in data analysis proposed by Miles and Huberman (1984) is that one should only rely on information that is provided by two respondents and not contradicted by anyone. This makes sense for traditional case analysis, when cases are constructed from interviews, intermittent observation, and *ex post* recollections. But it is a conservative rule of thumb which can lead the researcher to disregard important events or processes that the informants do not want examined. Ethnographers approach this with a different perspective, exemplified by Robert Hall's Law, "you can never believe the answer to a direct question about behavior", or more crudely "businessmen always lie" (Piore, 1979) and the tenet "a central postulate of the ethnographic method is that people lie about the things that matter most to them" (Van Maanen, 1979a).

With participant reviews of my drafts, my intention was to incorporate their feedback carefully in an attempt to: (1) correct factual mistakes, (2) maintain the cases' integrity, (3) minimize political fall-out. This was a delicate process, as reviewers sometimes practiced impression management and retrospective sensemaking that directly contradicted the rest of the data sources, including the reviewers' own correspondence. Engaged dialogue with the reviewers enabled modifications to the cases that did not dilute their essence and continued to provide depictions of the ventures "with warts and all".

I did not use quotes extensively in the thick descriptions – as is commonly done in conventional case study analysis to show the basis of one's reasoning

– because they are not based primarily on *ex post* interviews. Although I conducted interviews, these were a minor (and mostly cross-checking) component of the research. My intent is to avoid the readers' response described by Eisenhardt and Graebner:

“Interviews also often provoke a ‘knee-jerk’ reaction that the data are biased in which impression management and retrospective sensemaking are deemed the prime culprits. The prototypical reader asks, ‘*Is the theory just retrospective sensemaking by image-conscious informants?*’” (Eisenhardt & Graebner (2007)

Also, the extensive use of quotes supports the criticism of qualitative research that “it is simply the study of verbally expressed sentiments and beliefs rather than the study of conduct” (Van Maanen, 1979b).

CHAPTER 5

CASE STUDY: SC JOHNSON IN KENYA

FIRM BACKGROUND

SC Johnson (SCJ) is a privately-held multinational firm headquartered in the United States. With annual revenue in excess of eight billion dollars, it employs over twelve thousand people in more than seventy countries and distributes products in over one hundred and ten countries. Founded in Racine, Wisconsin in 1886 by Samuel Curtis Johnson, SCJ began operations as a parquet flooring company. Its focus evolved after the success of an early floor maintenance product – Johnson's Prepared Paste Wax – and the firm came to be known as Johnson Wax. Led by five successive generations of Johnson family members, SCJ grew into a consumer packaged goods company, producing and marketing consumer household brands in categories such as food storage (Saran Wrap, Ziploc), home cleaning (Drano, Fantastik, Mr. Muscle, Nature's Source, Pledge, Scrubbing Bubbles, Shout, Toilet Duck, Windex), pest control (Allout, Autan, Baygon, Off, Raid), air care (Glade, Oust) and auto care (Gran Prix, Tempo).

Continued family ownership has imbued the firm with a unique and somewhat idiosyncratic culture. Its headquarters remain in Racine – not in a globalized capital city – despite the fact that most of the firm's production and sales activities are conducted elsewhere. One of the corporate office's main functions is to continue to foster a clear and unified identity throughout the globalized company. It does so around a few key principles:

- Customer's welfare – SCJ's focus on service to customers was memorably captured by H.F. Johnson, Sr. in his Profit Sharing speech

of 1927, “The goodwill of people is the only enduring thing in any business. It is the sole substance...the rest is shadow!” This quote is known to all SCJ employees and headlines the firm’s statement of company philosophy “This We Believe.”

- Caring for its employees –SCJ’s motto, “A Family Company” strongly demonstrates its commitment to its employees. In fact, they are acknowledged and attended to within the firm’s statement of philosophy before any other stakeholder, including customers. An objective of every country and regional manager is to have his or her unit be recognized by external parties as one of the best places to work.
- Long term view – While certainly subject to the short-term forces that buffet the market and its competitors, SCJ has traditionally taken a longer view on some particular issues. It is willing to forgo short-term profits or growth in order to create a stronger or more resilient position for the longer term. This view is exemplified by SCJ’s modification of its food wrap product, Saran. Originally made of polyvinylidene chloride (PVDC), which is an excellent oxygen barrier and thus prevents food spoilage, SCJ switched to polyethylene -- which is not as effective – due to environmental concerns related to PVDC’s halogenation, even though it was not required by the government or its customers to do so.
- Sustainability – Maybe due to its history of producing and selling chemical-based products, SCJ has incorporated environmental sustainability principles deep into its operational structure in an attempt to always “do what’s right”. It has developed four global platforms for sustainability that it strives to integrate into its business plans at all levels: (1) using earth-responsible materials, (2) advancing social

progress and health, (3) preventing insect-borne diseases, (4) reducing consumption and emissions. These platforms are customized to the nature of SCJ's business, but also enable it look beyond the organization and visualize how it can best leverage its resources to have the greatest positive impact on society and the natural environment.

PRELAUNCH PROCESSES

In 2003, Samuel Curtis Johnson, then CEO and Chairman of SCJ, endowed a chair in Sustainable Global Enterprise at Cornell University's Johnson Graduate School of Management and funded the founding of a matching research center – the Center for Sustainable Global Enterprise. The first person to hold the chair was Dr. Stuart Hart, a professor of management whose research and outreach activities focus on how multinational firms can engage with low income populations (the BOP) to drive sustainable change. Stuart began to develop strong relationships with SCJ's senior leadership, and expectations grew within the firm for a concrete initiative that would put into practice his research ideas and SCJ's commitment to innovate in this area.

The person within SCJ that over time came to be most identified with this emergent initiative was Scott Johnson (no relation to the founding family). Scott was Vice President for Global Environmental & Safety Actions, and naturally became Stuart's counterpart within SCJ. Their first important joint effort centered on the collaborative development of the "BOP Protocol", a process-based framework for large multinational corporations to incubate sustainable new businesses in low-income communities. Stuart, Scott, and several of their associates brought together a collection of experts on

development, corporate executives, management scholars, and relevant practitioners to develop the BOP Protocol in a dedicated workshop held at the Johnson Foundation's conference center in October of 2004. The development of the BOP Protocol was supported by other multinational firms, including Hewlett Packard, DuPont, and Tetra Pak as well as by several foundations, university research centers, and non-profit organizations.

The results of the initial BOP Protocol workshop included a set of operating guidelines, a code of conduct, and the protocol that outlined the broad steps a firm should take to incubate an innovative, sustainable, and socially-embedded business at the BOP. Commitment to the initiative grew during the design workshop, and Scott and Stuart ended it by announcing a commitment by SCJ to "field test" the resulting protocol in Kenya and to convene the workshop's participants within a year to evaluate the field test and incorporate the lessons derived from it into an improved version of the BOP Protocol.

Framing of the Kenya initiative

SCJ over time had increasingly incorporated environmental sustainability concerns into its global operations. This had culminated in its award-winning Greenlist™ method for evaluating all material inputs into its products according to their environmental impacts. Looking beyond the firm, in an effort to tie its brands to beneficial social effects on consumers in developing countries, SCJ had launched a few unrelated programs in different countries. Focusing primarily on vector-borne diseases, SCJ initiated its "Iwas Dengue" public service program in the Philippines in 1998 and the "Healthy Children, Healthy Homes" program in South Africa in 2004 – a collaborative effort between the Raid pest control brand, South Africa's National Department of

Health, and other partners to train educators on how to avoid malaria. Underwriting the BOP Protocol effort was portrayed internally as the next step in formalizing SCJ's emerging approach to driving positive social change more broadly and systematically.

At the time of the BOP Protocol design workshop, Scot had been working extensively on Greenlist™ and also monitoring several small pilot projects related to SCJ's supply chain. One of the issues SCJ was grappling with at the time involved the sourcing of pyrethrum, a natural insecticide produced by the flowers of certain species of chrysanthemum. Pyrethrum is toxic to insects, but harmless to humans and the environment, and is thus widely used in pest control products. At its peak, Kenya produced around 70% of the world's pyrethrum – with about 200,000 families and small-holder farmers engaged in its cultivation – and SCJ had traditionally been the single largest buyer. For the country as a whole, pyrethrum was an important foreign exchange earner and a significant contributor to the national economy. To regulate this resource, the Kenyan government set up the Pyrethrum Board of Kenya with a mandate to register and license pyrethrum growers and control the substance's production, extraction and marketing. The Pyrethrum Board remains the sole processor and marketer of pyrethrum in Kenya.

Due to a series of internal problems, Kenya's pyrethrum extract production had been falling since 2002. Additionally, Sumitomo Chemical – a Japanese firm – had started producing pyrethroids, synthetic insecticides based on natural pyrethrum. SCJ was in the process of deciding to what extent and in what order it should reformulate its pest control products in order to switch to the cheaper and more stably supplied synthetic pyrethroids and how much pyrethrum it should continue to source from Kenya. Continuing to use Kenyan

pyrethrum would help to avoid having to reformulate products and would also help sustain the natural pyrethrum market which was estimated to support one million Kenyans. On the other hand, the erratic supply of natural pyrethrum could constrain SCJ's production, and the firm would remain hostage to the maneuverings of a single supplier run by political appointees.

Scott had been in conversations with a non-governmental organization (NGO) based in Kenya called Approtec (now called Kickstart) which produced and sold a treadle pump geared to small-holder farmers for irrigation. The discussion was to see if Approtec's pump could be used by pyrethrum growers to increase their production, thereby simultaneously improving their livelihoods and stabilizing SCJ's supply.

So when Scott and Stuart announced the field test of the BOP Protocol, they were able to say that it would be done in Kenya, in part because they wanted to use the BOP Protocol to bring to fruition Scott's discussions with Approtec. In other words, the BOP Protocol immersion team was to deploy to Kenya to collaborate with Approtec in developing a program that would encourage small-holder farmers to use treadle pumps and similar technologies to increase and stabilize their production of pyrethrum.

Immersion team formation and preparation

Given Stuart and other academics' central role in nurturing the BOP Protocol, as well as the collaborative multi-party way in which it had been developed, it was decided that the team that would carry out the first field test of the BOP Protocol be composed primarily of graduate students and recent graduates. Several interrelated factors supported this rationale:

- Cost and risk minimization – It was overall much cheaper to hire

students and use the partner universities' internship structures than to add personnel to SCJ's payroll. The reduction in costs extended beyond simple salary and hiring costs. For example, students could fly commercial rather than business class, could be deployed for three months with no need to return home before the end of the project, did not require additional corporate insurance coverage, etc.

- Experimental nature – Internships and short-term contracts enabled SCJ to retain the experimental nature of the initiative and invest in it gradually – as it provided results – rather than having to commit full-heartedly upfront. SCJ would also be able to “test” people in the field before deciding to make any permanent hires. Maintaining the experimental nature of the initiative was important to Scott from an organizational perspective, as it enabled him to fund it entirely from within his own department's budget and protect it from premature evaluation using traditional business metrics. He could give the initiative “space to breathe”.
- Freedom to operate – It was assumed that a fresh team, built independently of SCJ's current operations would have a greater freedom and flexibility in implementing the BOP Protocol than a team of existent SCJ employees who had to think of their careers in the longer term and may already be habituated to “the way things are done”.
- Unique capabilities – Assembling a fresh team would let SCJ tailor it to the task and include individuals with specific and appropriate talents and knowledge bases.

The decision to use students for the field test had one large and unexamined implication; the field test could only last three months. It would have to be carried out during the academic summer break. At this point, not much thought was given to how the initiative would be supported and staffed beyond its first three months.

From the outset, Erik Simanis – one of Stuart’s Ph.D. students – was selected as the team leader. Erik had been instrumental in organizing the BOP Protocol design workshop and was informally viewed as one of the key drivers of the whole effort. During the fall of 2004, Scott and Stuart delegated to Erik the job of putting together the initial student immersion team and training it for deployment to Kenya during the summer of 2005.

Erik set about building a team that drew its members primarily from the business schools of the three universities that were subscribing to the BOP Protocol. He did not create a job or internship listing and then interview the most promising applicants. Instead, he relied on the informal academic network that was emerging around the BOP Protocol to provide him a reduced number of already vetted candidates. Ultimately, the screening and selection of candidates was performed informally and primarily by the academic contacts that provided them to Erik. Erik rejected very few of the suggestions, although he did decide to add a new team member for part of the field test who had not been put forward and vouched for by other academics involved with the BOP Protocol.

The temporary nature of the team was also a key factor in some of the downsides to this approach. It proved difficult to hire the people with the appropriate mix of skill sets and experience for a one-off project – few students have the necessary capabilities for such an ambitious yet ambiguous

undertaking. Attracting more experienced talent (which usually does not mean students) was very difficult for positions that only lasted three months. Another downside to using students was the fact that most of them did not speak local dialects, were not conversant with and comfortable in the local culture, did not have established local networks, or could easily embed themselves socially.

Erik selected five graduate students in the fall of 2004 to form the team. One of them was a native Kenyan studying an MBA at the University of Michigan and another had experience working in Kenya in nature conservation. The team members were dispersed across the US during the spring of 2005. Erik began their training with the support of other BOP Protocol designers in this period by establishing a series of periodic conference calls. In these calls, the team members would discuss readings they had been assigned that helped develop their understanding of the principles behind the BOP Protocol, as well as some of the local intricacies of life in Kenya. Two of the team members, even began taking informal lessons in Kiswahili, the most widespread local language.

Site and partner selection

The selection of sites was closely tied to the search for initial partners. As mentioned, Scott's original plan was that the team would deploy to Nairobi – Kenya's capital – and work there with Approtec to determine the best site or community to work with in Kenya's rural, pyrethrum-growing areas. Before the team deployed, intense negotiations had already been undertaken to determine what resources (such as transportation, fund management, etc.) Approtec would provide, and how SCJ would reimburse the organization. Even though this particular project was not central to Approtec's mission, it wanted

SCJ's goodwill in order to garner support for its own projects.

Upon its arrival to Kenya, and its first interactions with Approtec's staff, the immersion team realized that Approtec did not operate in Kenya's pyrethrum cultivation areas – which were located primarily in Kenya's western highlands. It also became clear that the team would not co-create a fresh business concept around Approtec's main product (human-powered treadle pumps) and that Approtec was more interested in extending its existing business model rather than supporting the creation of brand new one. So while Approtec did provide logistical support in the early days of the project, the immersion team soon began to cover its own logistical requirements and to reduce its interactions with Approtec. After a few months, the ground-level relationship had died out, even though SCJ continued its corporate-level partnership with the organization.

Lacking a partner that could provide the deep social legitimacy the team needed in order to implement the BOP Protocol, it was soon obliged to engage entities other than Approtec in its search for a suitable community to interact with. The partner most influential in helping select the rural site was Egerton University. Erik had established contact with Egerton University through academic contacts at Cornell University prior to his departure. He had communicated with them originally because they were known for their skills in applying Participatory Rural Appraisal (PRA) techniques – practices central to the BOP Protocol and which the immersion team members would need to learn in Kenya, as they would not physically come together as a team before they left the US. Erik organized for a full week's training of the team in PRA imparted by Egerton specialists. Egerton's location – in the city of Nakuru, near Kenya's western highlands and pyrethrum growing regions – and its

experience conducting PRA in neighboring rural villages made it a natural choice for serving as a partner that could assist in selecting and supporting a rural site.

The actual site selected – Nyota Township – is a small village an hour’s drive away from Nakuru (under good weather conditions), and four hours away from Nairobi. The team settled on Nyota because of the offers of support and guidance it received from two additional local partners: the Ministry of Agriculture’s local extension officer and a self-help farmer’s group called Pamoja Pioneers. Ironically, no pyrethrum was cultivated in Nyota – but the team had been unable to find the right kind of partners in a village that did grow pyrethrum. Nyota is so remote, that the team members deployed there were the first *mzungu* (white people) that the villagers had seen in fifteen years.

Even though Scott and Stuart hadn’t originally envisioned it, the immersion team early on decided to select and run two sites. The main rationale for this was that two sites – one rural, and one urban – would produce two distinct business concepts and thus increase SCJ’s chances of establishing a successful business.

Personnel from SCJ’s local office reinforced the team’s decision to launch an urban site. Upon its arrival to Kenya, the team had made efforts to establish relationships with the local branch of SCJ in order to understand what resources SCJ already had in Kenya which could be used to kick-start the business creation process. All of SCJ’s personnel and operations in Kenya were centered in Nairobi. In fact, Nairobi served as SCJ’s headquarters and distribution center for all of Eastern Africa (Tanzania, Rwanda, Uganda, etc.). But SCJ had a reduced set of capabilities in Kenya; it didn’t produce anything

locally, nor did it handle distribution. Its main function was to manage large accounts, such as the local supermarket chains. All other functions, such as warehousing, distribution, and sales were outsourced to a local distributor.

In order to create a business that leveraged SCJ's existing capabilities in Kenya – mostly around marketing a subset of SCJ products – it made sense to explore options around urban end-consumers. So as the team was training itself in participatory development techniques and scouting rural options, it searched for a suitable urban site. Its search naturally centered on Nairobi. The team toured several of Nairobi's famous shantytowns but spent most of its time in Kibera – the largest and most famous of them all⁴. One of the reasons for the team's spending most of its time in Kibera was its relationship with the NGO "Carolina for Kibera" (CFK). Before leaving the US, Erik had made contact with the North Carolina based organization – whose mission it is to reduce inter-tribal violence in Kibera – and convinced them to support SCJ's activities in the slum for three months. CFK's Kenyan office was located on the outskirts of Kibera. Kibera was also home to a great variety of local and international NGOs and aid agencies; the section of Kibera where most of them have set up office is informally known as "Washington, DC". As the team came to rely on CFK's Kenyan personnel to introduce them to locals and create opportunities for interaction (such as participating in "Trash for Cash" community clean-ups), the team naturally gravitated towards completing its formal community immersion in Kibera and creating a business concept that

⁴ Often considered East Africa's largest slum, Kibera appears in the film "The Constant Gardener"; it has been visited by Barack Obama, Melissa Gates, Hillary Clinton, and many other famous politicians and celebrities. It has become Africa's poster child slum and hosts a disproportionate number of development and urban-renewal NGOs and aid agencies.

would serve that community.

In sum, Kenya was selected as country because of SCJ's prior intentions, incipient projects, specific supply issues it was dealing with at the time, and existent relationships with non-commercial partners. The country was selected before a team was built; it was selected by the originators of the project (Stu and Scott) and it was done with relatively little formal analysis and without much due diligence on alternate options. The specific sites were chosen by the immersion team, and were settled upon mainly by a process of "snowball networking" whereby the teams engaged with potential partners, and the choice of partner ended up determining the site. Although the search for sites was not systematic, the team did explore several options by engaging with different potential partners. The partners the immersion team ended up working with more extensively were those the team itself chose after extensive interaction in the field rather than the partners selected beforehand by top management.

BUSINESS CONCEPT CO-CREATION PROCESSES

When the immersion team members arrived in Kenya, at the beginning of June of 2005, they spent almost a full month getting acclimatized, meeting face-to-face with their partners, establishing a relationship with the local SCJ office, and attending to basic logistics like finding a place to live. By the fifth week, the team had split into two in order to run the co-creation process simultaneously in the rural and urban sites and was ready to begin its formal immersion in the communities.

In accordance with the BOP Protocol, Erik had structured the following two-month stage into a series of processes designed to produce a set of business

ideas co-created with members of each community. The original intent was to fully immerse the teams in the communities by means of homestays in order to garner insights and community trust that would prove useful for creating a business. The second step was to identify community needs, as well the assets each community could bring to bear in developing a new business. The final step would be to generate business ideas and evaluate them.

Community immersion

Besides some sporadic field trips to different urban and rural sites, the main activity planned for immersing the teams in the target communities was a series of seven-day homestays. One of the main responsibilities of the local partners – CFK in Kibera, and the Ministry of Agriculture agent in Nakuru – at this stage, was to locate local families willing to host the team members and let them participate in their daily lives as an additional family member rather than as a guest. Despite some problems in selecting the right variety of households to live with, each team member was eventually assigned to a family or community member.

In order to gain a deep appreciation of local practices, the team members were instructed to participate fully in all their host families' activities, work as well as recreational and social ones. In some cases, homestays were hampered by language, personal or cultural barriers. In the Nyota site, no team member spoke the local language, and few locals were fluent in English. Despite the challenges, the homestays turned out to be immensely valuable to the overall process. Though the original intent had been one of team acclimation and ethnographic learning, it became evident to the teams that the benefits really lay in the strength of the personal relationships built with the

hosts – which could later be leveraged for accessing more community members – and in the strong signal inadvertently sent to the community that their effort was a serious and different one; they were here to build a business together, not as missionaries or aid workers. Despite all the NGO activity in Kibera, very few outsiders are committed enough to the community that they are willing to spend the night in the slum, let alone a full week.

Needs and assets identification

In accordance with the BOP Protocol, the goals for this stage were to:

- Co-identify unmet needs with the community.
- Co-map with the community local assets and systems.
- Co-create with the community metrics for determining performance of the process.
- Assess which firm resources would be critical to the subsequent process.
- Identify capability gaps in both the firm and the community partners.

The BOP Protocol purposefully did not specify how these goals were to be achieved, and thus the urban and rural teams began to diverge in their approaches. The rural team completed this stage in five days by applying a series of techniques borrowed from PRA such as: social mapping, historical timelines, problem-ranking, and resource flow mapping. They relied primarily on these techniques because: (1) these are what they'd been trained in two weeks before at Egerton, (2) they had to work through translators at all times, and these techniques are designed for such situations, (3) the local population was familiar with these techniques and felt comfortable using them, (4) the translators, facilitators, and local partners were experts in these practices.

The rural team – down to two people at that time – designed a three-day workshop around these techniques in which almost two hundred fifty people participated. At the end of the workshop, the team retired to Nairobi for two weeks, where they analyzed and synthesized the workshop's output. The result of applying the PRA techniques without any adaptation was that the output centered solely on the community's resources, concerns, and goals and did not include any of SCJ's. It was also unclear who among the two hundred fifty people would work with SCJ initially to launch a business.

The urban team, confronted by a slum with hundreds of thousands of residents, first had to determine which subset of the community to work with. It logically began its search with CFK's existing networks, but did not explore much beyond them. It decided to work with the youth groups involved in the Taka ni Pato (Trash for Cash) program, of which CFK was a sponsor. The urban team focused on these groups because:

- CFK had existing relationships with them and could lend its social capital towards recruiting them to the SCJ initiative.
- They had already been vetted and selected by CFK and other NGOs, and been provided some rudimentary business and organizational training and marketing support.
- They were already involved in entrepreneurial and income-generating activities, in some cases operating substantial businesses within the slums.
- Their current activities centered on trash collection, recycling, and composting – activities which could conceivably be linked to SCJ's consumer product portfolio available in Kenya.
- They were proto-organizations with functional hierarchies, established

practices, and relatively stable memberships.

Overall, the Taka ni Pato youth groups looked like an established social platform in the slum that the team could work with to co-create a new business. But Erik soon realized that the local idea of what it meant to “partner” with an external organization to build a new business was not in synchrony with his nor SCJ’s intentions. Based on their extensive experience with NGO’s, most locals expected the external organization to simply provide them with resources to build their own small businesses or to participate in a branding or CSR initiative in which they’d wear or use company-branded clothing or tools in exchange for some resource. It was apparent that this kind of relationship would not lead to the co-creation of an innovative venture, and that thus simply identifying and mapping local resources and assets would be insufficient.

Accordingly, the urban team departed from its PRA training and stated work plan, and instead spent three weeks developing and implementing a series of “Participatory Entrepreneurship Development” workshops designed to change the youth groups’ perspective on business development and prepare them to be effective partners for SCJ. Over a period of ten days, the urban team ran four workshops with about thirty youth group members each in which they used participatory techniques borrowed from PRA, but adapted to the task at hand. The workshops covered themes and issues such as: creating alignment, discovering opportunities, combining resources, and learning to partner with large firms.

Business idea generation

The final planned activity of the immersion team was to co-create a series of business ideas that “had some legs” to them and which SCJ and the communities would want to pursue further. The initial plan was to produce several ideas so that SCJ could select the one it liked the most. The team’s main objective was to generate innovative business concepts, ones that had a “coolness factor” to them, rather ideas that could seem pedestrian or obvious. This criterion was a key driver of the idea generation process. The teams also wanted the ideas to emerge through a process of integration and recombination of community-originated and SCJ elements, rather than through the imposition of a particular party’s idea or vision.

But before the teams got to the stage of idea generation, a visit to the field by SCJ’s executive team had short-circuited the process to some extent. During the visit, while the teams were identifying needs and assets, Scott asked for a shortlist of business ideas. Erik complied by suggesting that SCJ could leverage the youth groups’ business of door-to-door trash collection in the slums to create a direct-to-home cleaning business using SCJ products – an idea the immersion team had already discussed. He was unable at that point to provide a compelling idea for the rural site, as he had not been participating in that need and asset identification process.

By the time the teams began their business idea generation activities, Scott had signaled that SCJ was interested in pursuing the cleaning business idea and did not expect a viable business in the rural area. Even before the idea generation process had begun, Erik had written a proposal for a nine-month follow-up and implementation process.

Nonetheless, the immersion team persevered in implementing the BOP

Protocol and carrying out its idea generation component. To do so, they again designed a series of “brainstorming” workshops to which they invited the most promising participants from the previous stage as well as representatives from SCJ, the local partners, and other organizations which they thought could provide valuable material, resources, or insights.

SCJ again signaled its reduced interest in the rural option by sending only a single person for two days of workshops in Nyota. In addition, because the rural team had been absent so long from the site and had not identified a strong subset of the community to work with, they were only able to get five community members to participate in the workshops, for a grand total of thirteen participants. The business ideas that emerged from that exercise, while potentially beneficial to the community members, were neither terribly innovative, nor of interest to SCJ. Suspecting that this would occur, the team had managed the workshops with the intention to allow SCJ to exit by offering alternative partners to the Nyota community members. At the end of the process, the team members left the township permanently and none of the business ideas was pursued further.

In Kibera, on the other hand, SCJ was already interested in a business idea, and the team had a broad sense of the idea that had to emerge from the process. But the team still went through the ideation process in order to flesh out the concept appropriately and gain some measure of local buy-in. Over two and half days, the team held a workshop with twenty five people, including representatives from the youth groups, SCJ’s Kenyan office, the partners (CFK, Egerton, and Approtec), and assorted NGO representatives. Using the metaphor of building a house, the team facilitated the workshop so that its participants recombined already identified resources into business ideas. Of

the five ideas generated, the team indicated SCJ would pursue the one called “Community Based Cleaning and Waste Management Company” which was to have the youth groups expand their trash collection services to include in-home cleaning and pest control services in the slums using bundles of SCJ products. The name of the business was later shortened to Community Cleaning Services (CCS).

BUSINESS CONCEPT DEVELOPMENT PROCESSES

SCJ’s initial business concept was proposed by Erik, and later by the participants of the urban ideation workshop, in July of 2005. At the same time, Erik generated a nine-month business development plan for continuing the initiative upon the departure of the immersion team at the end of the month. Its main objectives were:

- To guide the participating youth groups in developing the necessary skillsets, capabilities, and vision for implementing the business.
- To better understand the market in order to build a business that resonated with the community.

He received a verbal sign-off on the plan and its budget from SCJ and quickly moved to set it up before departing Kenya. His primary actions in this regard were to:

- Select a community liaison to be hired full-time by SCJ.
- Convince SCJ’s East Africa manager to commit 20% of an SCJ’s manager time to the project.
- Reach an agreement with CFK for the NGO to provide working space for the community liaison and continue its involvement in the project.

Project transition to Kenyan field team

When the immersion team left at the end of the summer of 2005, the initiative was entrusted to Edwin, a local community member who had collaborated with the immersion team during its stay in Kenya, and who was now designated “community liaison”. He was provided space and support at CFK and was eventually hired as an independent contractor. After he left Kenya, Erik agreed with Antoine – SCJ’s general manager for Kenya and East Africa – that the director of operations, Joseph, would be the ideal person within SCJ to manage the project given his communication abilities. Joseph was assigned a day a week to the project.

Edwin soon proved unable to perform the tasks which suddenly became expected of him. Rather than simply operate as a “liaison”, he found himself in the role of main driver of the project, having to develop work plans, mobilize work on the ground, and generally lead all the activities necessary for launching a new business. As Joseph became increasingly anxious about the lack of progress, he turned to Kimeu, a locally-based social entrepreneur with a management degree and strong leadership style whom he had met during the ideation workshops. Joseph convinced Kimeu to help with the project on an informal basis, and Kimeu quickly developed a comprehensive market research plan for the youth to implement.

Erik, who despite not being an SCJ employee still retained budget control of the project, returned to Nairobi in November of the same year to evaluate its progress. Upon realizing that not much progress had been made in the three months since he’d left, and that no one in the community had a clear idea of what the business was to be or any great commitment to pursuing it, he did the following:

- Hired Kimeu on a half-time basis to be the on-the-ground leader of the project and repositioned Edwin in a supporting role.
- Established an agreement with CFK for the NGO to play a more central role in the project, including using their administrative apparatus for hiring people in Kenya and managing all the project's funds and expenditures in Kenya.
- Convinced SCJ Kenya to commit an intern to participate in the initiative, beginning in January of 2006.
- Held a "Launching the Partnership" workshop with the youth groups to refocus and reenergize them.
- Created a detailed three month work plan for developing the business in order to launch a pilot.

Capacity development and preparation for business launch

According to the work-plan developed by Erik in November, the field team – now consistent of Kimeu and Edwin, soon to be joined by an SCJ intern, and supported by Joseph – would focus on developing three areas with an eye to formally launching a business:

- Training the youth groups.
- Creating a business identity.
- Pilot testing components of the business to evolve a value proposition.

Kimeu and Joseph proceeded to coordinate a series of training workshops (imparted by them or close associates) to develop the youths' ability to run a business with SCJ products. Some workshops focused on SCJ product lines and how they should be used, others covered business basics such as:

accounting, marketing, and customer management. Three representatives from each of the nine participating youth groups were supposed to attend each workshop. In reality, attendance was sketchy and in many cases different people from each group turned up for each of the workshops, diminishing continuity and knowledge accumulation.

The groups also performed a marketing survey in two slums, administering a questionnaire to several hundred residents, and collected data on the kinds and quantities of insect control products used and on alternative pest control techniques practiced.

As the field team worked with the youth groups to prepare them to launch a business, it became increasingly obvious that Edwin was unable to perform his duties as liaison and supporting coordinator, and in January 2006, he was replaced by George, a CFK program officer with experience as a social worker and existing relationships with all the youth groups.

When confronting the issue of the business's identity, it became apparent that the nine different youth groups had differing capabilities and levels of interest in the business. Some groups had strong identities, local offices, good organizational skills, and ran profitable businesses, while others were not much more than amorphous groups of friends. The field team, in consultation with the youth groups and with Erik, decided in January that all the youth groups should be integrated into a single federation with which SCJ could officially partner. Under this arrangement, each group would retain its identity and existing operations, but would apportion part of its efforts to the SCJ initiative. In addition, this new federation – the Coalition of Young Entrepreneurs (CYE) – would be able to partner with firms other than SCJ.

Erik visited Kenya in March of 2006 to assess progress. He was accompanied

on the trip by Duncan, another Ph.D. student and BOP Protocol designer to which he planned to transfer project leadership to in order to head up a separate project with another firm. Two other graduate students who were participating in a practicum to analyze the potential of SCJ's BOP initiative also travelled to Kenya on that occasion. The group of graduate students quickly realized upon their arrival that things had drifted from the intended work plan, and that the youth groups and field team were unprepared for launching the business in the immediate future. The process of forming and then formalizing CYE had engulfed most of the participants' attention and energy. The focus on creating CYE had politicized the business development process and made it overly bureaucratic. Numerous meetings had been held amongst representatives of the youth groups to design and ratify a constitution, determine voting rights, create the organization's bylaws, assign responsibilities, etc.

To add to the complexity, different representatives from each youth group were often sent to each meeting, thereby increasing confusion and lack of continuity. This politicized process, in which different individuals and youth groups jockeyed for position and influence, also served to inflate expectations about future earnings and precipitated involved negotiations for apportioning the sharing of the future profits. Also, each youth group had its own organizational structure, separate constituency, and sometimes operating businesses which needed to be somehow separated from or integrated into CYE.

Activities designed to build organizational capability, test components of the business model, and begin to stimulate demand had been carried out perfunctorily or not at all. For example, though the youth had been provided

SCJ products to carry out field tests to determine how they could be used in slum conditions and observe customer reactions, all the products had been used up in unaccountable manners and very little data had been generated – most of it untrustworthy and of very little value. Despite a few workshops on the subjects, the youth had no real sense of how to use the products, how much it would cost them to provide services, how much they would be able to charge for the services, who their customers would be, how they would handle supply and storage, how they would keep accounts, etc.

An additional issue was that the original business concept – to bundle SCJ’s varied products to provide in-home cleaning services – had been narrowed to a focus on insect control. This was driven primarily by the field team, which did not really comprehend the original business concept – its members hadn’t been around for its creation – and did not see much use for SCJ’s non-insecticide products within the slums. This perspective was also supported by SCJ’s overall vision of linking their sustainable development initiatives – such as this one – to their products related to insect control and vector borne diseases. So the field team provided the youth groups mainly with Baygon and Raid insecticide products.

Despite this lack of preparedness, the youth groups were very impatient to launch the business and start making money. By this time, the youth had been “developing” the business concept and its supporting structure for eight months. During this time, neither SCJ nor CFK had remunerated them for their efforts and commitment to the process, all rewards were contingent on making a profit on the business once it launched. This also meant that there had been considerable turnover among the participating youth as some got jobs, started school, or dropped out of their respective youth groups. To make up for this,

new youth were continually being recruited to the venture.

After the visit in March of 2006, Erik began to transfer leadership responsibilities to Duncan. Duncan intended to manage the project on an interim basis while SCJ hired a manager to take it over. He would train this manager and then shift to an advisory role. To this end, he traveled again to Kenya within two months with an SCJ consultant and Justin, one of the graduate students who had participated in the original immersion in 2005, and who SCJ was considering hiring as full time executive manager for the initiative, among others.

During the May trip, as Duncan introduced the consultant and Justin to the youth groups and the field team, it was apparent that the field team had still been unable to begin building the necessary capabilities within the youth groups, and that it had continued to promote and spend most of its attention on forming CYE. By this time, the pressure to launch the business was being felt not only from the youth groups, but from SCJ itself, which felt it was now time to “stop the academics’ studying” and “get down to business”. But both the consultant and Justin agreed that the youth needed more preparation before the business could be launched with any realistic chance of success.

Upon returning to the US, Duncan set about recruiting a fresh team which could be deployed over the summer to Kenya to accomplish two objectives: support the field team and youth groups in preparing to launch the business; and train and restructure the field team so that it could successfully manage, coach, and support the entrepreneurial efforts of the youth groups.

He selected two people with experience in international development and personal knowledge of the initiative, and deployed them to Kenya for the summer of 2006. Duncan set up living quarters for this “summer team” right

beside Kibera, and the two-person team then spent the entire summer working with the youth groups and the field team. To get things done in time and have an official business launch before their departure, the summer team had to take a very hands-on approach and provide strong leadership. This was in stark contrast to how the field team had become accustomed to managing the business development process. As per their experience and training, the field team had been “facilitating” the youth groups’ efforts, nudging them and supporting the groups’ ideas, rather than setting a clear direction and clearly conveying the objectives that needed to be accomplished in order to keep the initiative viable.

The summer team instituted a series of more effective training workshops designed around the specific tasks inherent to the business, worked to adequately cost and price the proposed services, developed appropriate marketing materials, set up logistics and administrative systems, and supported the development of the business launch activities. At the same time, they worked with the field team, attempting to professionalize its members and provide them with the leadership and organizational skills needed to better support the youth groups.

One of the practices they implemented was a Friday morning breakfast meeting with Joseph, SCJ’s director of operations. Over time, Joseph’s main responsibilities had kept him evermore distant from the field team and the youth, to the point that he was doing most of his communicating indirectly through the SCJ intern, John. John had been assigned to the field team on a part time basis in January of 2006 – and spent half his time at SCJ’s offices on other duties – enabling Joseph to communicate with him without having to visit the field. But Joseph had real business experience, knowledge of SCJ’s

products and organizational culture, was local to Kenya, and had a knack for communicating with the field team and the youth groups – the reasons why he had originally been tasked with running the project for SCJ.

Through the breakfast meetings and other activities, the summer team reinvigorated communication between Joseph and the field team, thereby leveraging his coaching and management talents. They also reengaged Antoine, Joseph's boss and SCJ's general manager for Kenya and East Africa. Antoine began to participate intermittently in the breakfast meetings and also spent a day each month in the slums with the youth groups. By the time of the official launch in July, SCJ's Kenyan staff was finally becoming more directly involved in the initiative and starting to take partial ownership of it.

As it spent more time with the field team, the summer team realized that the field team leader was the main reason the process of building CYE had been so drawn out and politicized, and that capability building had been so ineffective. Duncan instructed the summer team to search for a suitable replacement, but in the short time they had, and given the unconventional nature of the project and the unique skillset it required, they were unable to locate a promising candidate. Instead, they decided to cultivate George, the CFK officer who had been seconded to the field team in the spring, to become the team's leader. While recognizing that he needed to improve some of his leadership and management skills, they believed he was the best option at the time. At the end of the summer, George was promoted to field team leader and Kimeu left the team.

Business launch

In late July, before the summer team left Kenya and twelve months after the immersion team had left Kenya, “Community Cleaning Services” (CCS) was officially launched with a series of community events held sequentially in three different Nairobi slums. More than a hundred youth group members participated. The launches consisted of a series of community mobilization and customer awareness building activities in each slum, such as a parade with music and uniformed youth, community theatre with themed skits, and distribution of marketing materials.

To begin actual operations, the participating youth group members were provided with uniforms they had helped design, cleaning gear, and SCJ product on consignment –using the administrative systems the summer team had developed. Once equipped and provisioned, the CCS members set out to search for customers. They initially sold a few services to their families and close friends, but once they had exhausted their inner circle of contacts, sales for all the youth groups fell precipitously.

When they realized that customer awareness built through the business launch activities did not automatically translate into sales, and that acquiring customer leads and closing sales took time, effort and discipline, the youth’s efforts quickly waned. Besides a natural human inclination to avoid hard work and trying to sell things to complete strangers, many youth could not afford to spend considerable amounts of time on an activity that did not offer a guaranteed income and impinged on their ability to generate other opportunities for generating income or sustenance. Three weeks after the official launch, all sales and most sales efforts had ground to a halt.

BUSINESS CONCEPT IMPLEMENTATION

Once the initial business concept had been fleshed out, CYE created, and CCS officially launched, it quickly became apparent that the business would not simply take off on its own. The level of engagement and amount of time spent developing the business prior to its launch had unwittingly raised CCS members' expectations of its public acceptance and uptake. Yet a few weeks of operation quickly demonstrated how difficult it would be to generate demand for its novel commercial offering, and how unprepared all the parties participating in CCS really were for dealing with the task of creating a market while solidifying a functional organizational structure.

The field team, SCJ management, and the youth groups had to deal with a series of barriers that crystallized when the business was being rolled out. To respond to them, they devised an array of strategies and actions which they implemented over the course of the first year of operations.

Initial barriers to business development

In the first weeks after the business launch, many issues surfaced, both foreseen and unforeseen ones. First of all, it had been clear from the outset that SCJ's insect control products were not designed for slum conditions, and therefore pretty ineffective when used as originally designed. To give an example, pre-launch field tests conducted by CCS had shown that a single two-by-three meter porous mud brick wall of a slum dwelling usually housed more than a hundred large cockroaches, and that an entire can of Raid or Baygon spray was insufficient to eliminate pests from the wall, or protect it from later infestation. Knowing this, the summer team had worked to try and reincorporate other SCJ products into the business concept (such as air

fresheners and surface cleaners) so that the youth would have a varied toolset with which to provide in-home cleanliness. The summer team had also augmented the youth's service repertoire beyond the ones based solely on SCJ's products so that they could offer services which were complementary and which helped attack the root cause of the issues they were dealing with. For example, by offering to clear weeds and remove junk and garbage surrounding a shanty, cockroaches and other periurban pests were denied alternative habitats when the inside of a dwelling was treated.

But even these adaptations proved insufficient for providing meaningful pest control and cleanliness at a reasonable cost. Conditions in each slum were different, but overall, it proved very difficult to isolate a single dwelling from its surroundings in order to keep it clean and pest free. It also proved very difficult to eliminate within-dwelling pests in a cost and time-effective manner. The few repeat customers CCS managed to acquire were usually of higher income within the slums, and even in those cases it usually took a series of long and relatively expensive visits to do an initial "spring cleaning" and simply rid the dwelling of its extraneous internal junk and debris.

Another worrisome issue was the cost of the SCJ products. In an attempt to ensure that CCS would be profitable for the company and not develop loss-incurring habits from its inception, SCJ adopted a firm stance on prices. It provided products to CCS at the highest volume discount price available to distributors. This meant that CCS' margins were pretty slim as the end-price of the services would naturally be bracketed by the price for the same products available in the local supermarket chains. In some cases, when the supermarkets offered SCJ products on sale, it was cheaper for CCS to acquire the products in the supermarkets than directly from SCJ. So in order to make

money on sales, CCS had to price its services relatively expensively yet accept very slim margins and hope for large volumes of sales. Scaling to large sales volumes was hindered by the fact that there weren't many significant economies of scale to be achieved in the service-to-home model.

CCS also offered a novel service with which the market was unfamiliar. Willingness to pay was something that had been very difficult to ascertain beforehand since no comparable service offering existed, but it was suspected to be quite low. With high costs on one side, and low willingness to pay on the other, the summer team had done its best to strike a balance by searching for the ideal bundles of products and services, and training the youth groups to be as efficient as possible.

Despite these issues, it wasn't prices, product configuration, or ineffectiveness of the services which led to CCS members' early discouragement; it was the youth's inability to even get customers interested. The business concept was too foreign to the community. No business in the slums is conducted on a home-to-home basis, people visit a few main arteries in the slums where the businesses are located and commerce occurs. Beyond the issue of having salesmen coming to their doors and trying to conduct business in nontraditional settings (someone's home), no one in the slums was accustomed to let strangers *into* their homes to provide services. CCS members learned that many slum dwellers are ashamed of their living quarters, and would not conceive of letting strangers in. Nor for that matter do most slum dwellers use their homes for entertaining or meeting family and friends. In general, most community members proved to be distrustful of strangers in their homes – even fellow shantytown dwellers – for a number of reasons.

CCS members discovered that – contrary to a common assumption in development circles⁵ – social capital can be quite weak in Nairobi’s slums. There are so many people in such a small area that social networks and strong ties often peter out within a few dozen yards of a person’s home or place of business. Crime, especially theft, is rampant, and it’s mostly visited upon slum dwellers by other slum dwellers. Additionally, Kenya’s ethnic and tribal diversity is tainted by an undercurrent of violence that erupts sporadically and unexpectedly – as it did after the 2007 presidential elections. It’s difficult for westerners to appreciate, but local life is interwoven with subtle racial and tribal distinctions which greatly affect social relations and the ability to gain the trust of strangers.

Another barrier that CCS encountered was related to religious and traditional practices. In many cases, the person at home was the wife, and it was seen as very unseemly that she let male strangers into the home when the husband was not around. In other cases, the wife or housekeeper (even in the slums there are housekeepers and nannies) did not have the authority to authorize such expenditures, even if she had the cash.

Overall, the social fabric, which on the surface can look strong, proved to be quite thin and precarious in Nairobi’s slums. It’s often unrealized how important the social fabric and the basic levels of trust it engenders are necessary for business to flourish, especially for new and innovative ones that require significant changes in customer behavior. But in CCS’s case it became

⁵ For example, Hernando de Soto has made famous the story of how the barking of dogs indicated to him when he was crossing informal property boundaries in Bali, thus implying that there is a level of social cohesion that ensures property rights despite the lack of formal systems of property contracts.

quite clear. Thus, within three weeks of the launch, most of the youth groups participating in CCS had stopped trying to offer the services.

Implementation tactics and actions

At first, the field team – now composed solely of George, the CFK officer, and John, the SCJ intern – simply tried to encourage the youth to try harder by visiting them and talking with them. In August of 2006, Justin was hired full-time by SCJ and posted to London with the mandate of coordinating SCJ’s sustainability efforts in Africa, including BOP business development. In September, he began to interact with the field team with an eye to becoming its full time manager. Thus, in consultation with Joseph, Duncan, Justin, and Antoine, the field team settled on a specific strategy to counteract the lackluster sales and drooping effort that followed the business launch. It decided to focus its efforts and attention on a single youth group at a time in an effort to develop a series of “success cases” which it could then use to motivate the rest of the youth groups.

But beyond spending most of its time working with a single group at a time, the field team really didn’t know exactly what to do. Joseph’s experience in sales and operations became invaluable at this point, and he provided the guidance the field team needed. George and John began to accompany the selected youth groups on their house calls, to see for themselves what the youth were encountering. Given that continually knocking on doors and getting no sales quickly gets discouraging, the field team had to spend lots of energy motivating the youth to continue trying as the team ascended its learning curve and got a better understanding of the situation. The unstated policy had always been to not pay the youth to participate in CCS – they were to be

partners and would accrue benefits when the partnership was successful – but the field team had to resort to some forms of compensation, such as “lunch money” to ensure that the youth continued knocking on doors.

The field team first focused on a youth group from Kibera called Bunker which at the time had a strong leader and a motivated and cohesive cadre of members, all of whom were participating in CCS. Over the course of several weeks of working with the group, sales gradually crept up as Bunker’s members gained confidence, cultivated customers, adapted their offerings, and honed their marketing. When the sales trend looked promising, but before Bunker was making meaningful profits, the field team turned its attention to a youth group in a separate slum. But as soon as George and John stopped focusing full time on Bunker, its sales efforts immediately declined.

This experience repeated itself with each of the groups the field team sequentially focused on during the fall of 2006. Over the course of the fall, Joseph distanced himself from the field team as he prepared to exit SCJ and Justin gradually took over more of the day-to-day management of the field team, despite being located in London and traveling to Kenya about once every month or two. Duncan continued to manage the project’s budget and worked with Justin and the field team in determining its overall direction.

By December of 2006, the field team had worked extensively with youth groups in three different slums and helped seed hundreds of sales and clients but had been unable to lead any of the groups to sustained profitability. Given that the overall trend over the first six months of business was not positive, and that the efforts by the field team were not turning things around, Duncan began to press for more profound changes to the initiative. His two main objectives were to strengthen the field team’s leadership and to reduce the

cost of SCJ material inputs to improve CCS's margins.

George had not developed the leadership capabilities that the summer team had hoped for, and Joseph had stopped guiding the team when he left SCJ in September. Justin did his best to provide hands-on-guidance, but besides not being local to Kenya, he was only there sporadically as he was assigned to the initiative on a part-time basis (thirty percent of his time). Additionally, communication costs and poor quality severely limited his ability to interact meaningfully and in a timely manner with the field team.

Justin initially considered that the business had to show signs of growth and sustained performance in order for SCJ's senior management to approve modifying or expanding the field team. But as it became increasingly obvious that a major barrier to improving performance was the composition of the field team, Justin and Duncan were able to secure approval for hiring Joseph as a part-time consultant to the project for six months, with the expectation that he would gradually be incorporated full-time as the field team's local leader. Joseph was the natural choice for leader as he had already demonstrated that he had the right skill set, knew how SCJ operated, was local to the area, and was the person in SCJ with the most intimate knowledge of CCS and its history. At the time of his hiring, Joseph had set himself up as an independent entrepreneur and was able to join the initiative as a consultant.

The team's second objective – reducing SCJ's prices to CCS – was more difficult and time-consuming to implement. The products SCJ marketed in East Africa at the time were not designed for slum conditions, or for service-oriented applications. In some cases, the cost of the packaging and delivery mechanism (e.g. an aerosol can and its nozzle) could account for more than fifty percent of the cost of the product. Due to the regulatory hurdles for

designing, registering, and introducing new products to Kenya with the characteristics needed for the CCS business model, the team proposed selling the existing products to CCS at a price that would reflect what the new products would cost once they'd been formulated, packaged, and transported appropriately for "branded service providers" such as CCS. This would afford lower price points and better margins for the service providers, innovative application modes better adapted to slum conditions, better environmental attributes (less packaging waste, more precise applications), and more effective service administration (easier to cost out, measure, distribute, store, etc.). An example of one of these alternatives could be SCJ selling super-concentrates of some of their products to CCS, who would then dilute, dose and package them as needed.

During the 2006 end of year review with senior management, Duncan formally asked for the option of experimenting with different regimens of reduced prices to CCS. The proposal was initially resisted in the view that the CCS model of pro-rating the cost of existing products across several buyers by means of "servicizing" had to be tested. Reducing prices to CCS below SCJ's current production costs would imply a different, untested, and more comprehensive business model which would require significant changes in SCJ operating procedures. There was also concern within SCJ – espoused also by Antoine – that if CCS members received SCJ products at prices well below those available to supermarkets and storekeepers, that they would be tempted to simply resell them on the black market rather than perform services.

But the continued underperformance of CCS eventually enabled Justin and Duncan to negotiate a proposal that would effectively lower the cost of SCJ's products to CCS. Rather than simply offer the products at lower prices,

Duncan, Justin, and Joseph developed a rebate system whereby the CCS members would get the reduced-price differential applied to their subsequent consignment, once the services had been provided. The system was meant to protect against the creation of a black market while simultaneously encouraging the development of robust book-keeping and reporting, as rebates were only made effective upon proof of services rendered.

The existing budget did not have to be increased to hire Joseph nor to implement the rebate system due to savings in other areas that reflected the reduced number of CCS members active in the initiative and the small size of the field team. The process of getting approval for both changes took several months of discussions, presentations, and negotiations. Their implementation also took time; Joseph joined the initiative as a part-time consultant in March of 2007, and the rebate system was rolled out during April and May of 2007.

BUSINESS EVOLUTION

During its first year of operations, CCS did not generate any profits for SCJ, but yielded rich insights into Nairobi's low-income urban market and the capabilities SCJ needed to develop in order to nurture businesses that effectively served it. About fifty individuals from youth groups in three different slums had coalesced as the core of CCS, but operating profits did not grow to be sufficient to meet their income needs. They all participated in CCS on a part-time basis in the hope that it would eventually reach a level of profitability that enabled them to focus on it full-time. The different youth groups, each in a different slum, evolved different flavors of CCS, with services and prices tailored to their community and specific circumstances. During the second year of operations, the business continued to diverge and eventually only a

single version survived.

CCS's organizational structure also evolved during its second year. Originally conceived as an additional service provided by a confederation of youth groups partnered with SCJ and CFK, CCS was gradually transformed into a micro-franchise model of individual entrepreneurs that reported to the field team – which itself was slated to become the “master franchisee”.

The initiative's administrative structure was adapted during this period to reflect the changing roles of the different institutions and individuals involved, incorporate new players, and better support CCS's emerging business structure. Duncan transferred most leadership responsibilities to Justin, Joseph became the field team lead, and CFK shifted to a social auditor role.

Business model bifurcation

At the start of the second year of operations, during the summer of 2007, the youth groups Bunker and Tuff Gong kept refining and playing on variations of the in-home cleaning service concept. The business was now strengthened by lower prices for the SCJ inputs, even if the rebate system was cumbersome and not attractive to the youth. The groups continued to adapt the business to their communities and to diverge in the market segments they were serving. For example, Bunker – which operated in a predominantly Muslim and Nubian community of Kibera – began to offer carpet-cleaning services, as most Muslim homes had them and most had never been cleaned.

In general, Bunker served the richer and more established slum residents, some of which had multi-family compounds and extensive businesses. For these clients, Bunker would offer time-consuming and labor-intensive customized services, such as polishing all a home's furniture or plastering all

the cracks in a room's walls. The prices for these services were much higher than what most slum residents could afford, and each service took time to be secured, negotiated, set up, and ultimately performed.

Tuff Gong originally also wanted to penetrate higher income markets – in their case nearby middle-class gated communities – to which they hoped their CCS affiliation and uniforms would gain them access. In essence, they wanted to leverage the legitimacy CCS provided them to become glorified janitors and gardeners. But the field team nixed this idea, as the central purpose of CCS was to serve the slum communities. In view of this, and inhabiting the poorest slum (Mitumba), Tuff Gong slowly drifted towards offering the cheapest service possible and using a very small amount of SCJ product to ensure that it would not lose money on each transaction. The amount of product used was usually too small to have much beneficial effect in slum conditions. Additionally, Tuff Gong's service was simplified to a degree that it became merely the application of the product; the youth group unbundled the products from CCS's associated labor and skill-intensive services in order to reduce the time spent with each customer and thus be able to pursue more customers in search of larger sales volumes.

The third group, "Mathare Environmental Conservation Youth Group" – known as Pequeninos for its soccer team – operated in one of Nairobi's largest and most violent slums, Mathare⁶. The section of Mathare in which Pequeninos operated is markedly different from Kibera (mud shacks) and Mitumba

⁶ There is a debate as to which is Nairobi's largest slum, Kibera or Mathare. It is difficult to gauge their populations, with estimates ranging from 170,000 to 2 million people in each. Their levels of violence are also difficult to quantify, with Mathare known as hotbed of gang warfare, and Kibera as a center of political and ethnic rioting.

(corrugated metal shacks) in that most of its dwellings are multifamily high rise buildings made of concrete. The archetypal building has six stories, with six or seven rooms and a shared toilet and washing area per floor. Each room is typically a single dwelling, holding a family or a bachelor. Pequeninos was a long-established youth group that had developed a thriving trash collection business in Mathare. It had over two thousand regular clients from whom it collected trash on a weekly basis. SCJ and the field team initially wanted to work with Pequeninos in order to use its established client base as a platform for spreading CCS. But early on in the process, the members of the group in charge of trash collection abandoned CCS due to its low profitability vis-à-vis their existent business. The more junior members of the group – the ones who had to carry all the trash but received the lesser salaries – were the ones that remained committed to CCS. Since these junior members did not control the relationships with the existing customer base, they had to establish a new customer base for CCS in Mathare in order to retain a larger portion of the revenue derived from each customer.

Due to Mathare's built environment, pest control services were not very attractive there. But as the Pequeninos members experimented with SCJ's different products, they eventually discovered that there was a significant demand for toilet cleaning services⁷. Because the toilet on each floor of an apartment building was typically shared by six or seven families, a "tragedy of the commons" usually ensued in which no single user wanted to clean up after the others. Thus, the toilets tended to become incredibly filthy and in many

⁷ I use the term "toilet" loosely. In this context, it includes a variety of latrines, privies, outhouses, washing areas, lavatories, and restrooms.

cases unusable; parents would forbid their children from using them and resort instead to the infamous “flying toilets”. CCS members eventually landed contracts to clean the toilets on some floors on a regular basis, either by negotiating with landlords or by mobilizing all the members on a single floor to cooperate and each pay their share. For this service, Pequeninos used Toilet Duck which was the most cost-effective of all SCJ’s products, and the one best suited for service applications in slum conditions. These contracts provided a steady and recurring source of income, reduced the need of door-to-door sales efforts, and created a work schedule for CCS in Mathare that enabled its members to hold other jobs concurrently.

Over time, CCS in Mathare evolved to focus solely on toilet cleaning. The most difficult part of the business tended to be the procurement of contracts; some level of social mobilization or coercion was needed to get all the families on a floor to agree to participate and police free riding. In many cases, landlords also had to be dealt with. CCS experimented with several different strategies for acquiring new contracts. For example, in one case, CCS invested significant resources in fixing up a floor’s common washing area and toilet, painting and retiling it to make it usable again in exchange for a fixed contract. Once a contract was landed, clients tended to be very happy with the results and were more inclined to continue payments. Some clients mentioned that the service was life-changing in several ways; their children could now safely use the bathroom, they now felt comfortable having guests visit them, etc.

To summarize, during the second year of operations, the original CCS business concept split into three distinct business models. Each of the three participating youth groups gradually evolved the concept to fit its operating

environment and capitalize on the opportunities it perceived. Bunker provided infrequent, labor-intensive, customized in-home cleaning and home-improvement services to Kibera's richer residents; Tuff Gong offered low-priced, short-duration services for air freshening, mosquito control, and bed bug eradication; Pequeninos cleaned and maintained shared toilets on a contract basis.

CCS structural changes

CCS was initially structured as a service-providing organization built on top of CYE. CYE in turn, was a loose coalition of nine youth groups guided by a committee with members from SCJ and CFK (see Figure 2). CYE was originally conceptualized as a vehicle for harnessing the youth's existing organizational structures and community networks, and as a single coherent organizational entity that SCJ could partner with. The specifics of CYE's structure were the result of several forces operating during the business's formation.

From the outset of activities in Kenya, Erik had channeled the process so that the resulting organization would be based in, and run by community members, for the benefit of the community. This desire was in tune with the BOP Protocol's overall mission of providing mutual value – to the community as well as to the implementing firm. The prevailing vision at the start of the initiative was that meaningful value for the community and becoming “local to place” – or truly becoming socially embedded – relied on partnering with the community, not hiring its members into SCJ, or introducing external people to the community to provide products or services. The intent was also to leverage existing social structures, not to replace them. Thus, the formation of a

community-based organization (CBO) built on existing social structures was a natural outcome.

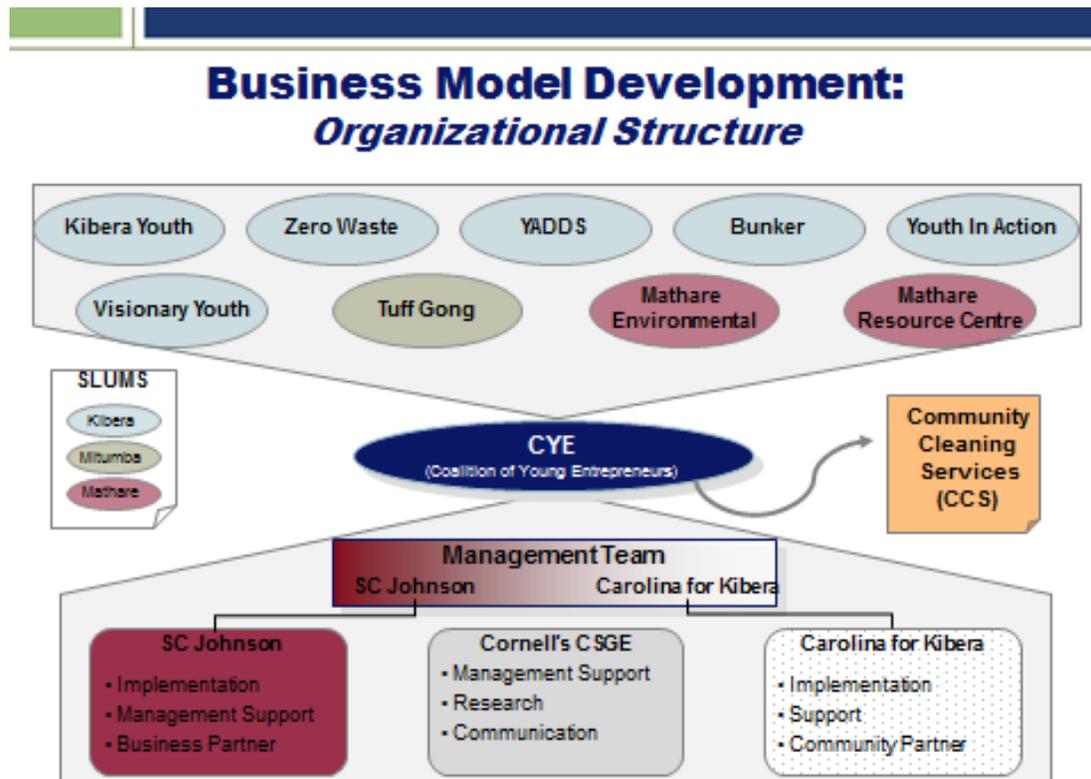


Figure 2 –The initial organizational structure of CCS, from a slide created by Justin DeKoszmovszky for a group presentation to the Business for Social Responsibility Conference, Nov. 2006.

Also, SCJ’s caution in hiring full-time personnel to the field team and its preference for contracting external organizations and consultants to midwife the creation of a local organization that operated on the ground ensured that the resulting entity would not be an integral part of SCJ – it would be a partner. An additional factor in the shaping of CYE’s structure was Kimeu’s leadership style during the formation process. Instead of setting out clear criteria that

CYE had to comply with as an organization in order to partner effectively with SCJ and be able to implement CCS, he let the youth group members guide the process of CYE's creation – as per his training and experience in participatory development. This meant that many issues relating to the distribution of power and rights among the existing youth groups became the foundational bed of CYE and embedded themselves in its culture.

As the official business launch date approached, the main appeal of the CYE-CCS structure lay in its potential for a broad roll-out. With nine youth groups participating –each one with ten to thirty members – CCS would have more than a hundred active members in three slums from day one. But the very structure of CYE, which encouraged debate over action, guaranteed that none of the hundred or more participating members were sufficiently prepared for operating the business successfully at the time of its launch.

The inclusion of the already-existent youth groups in CCS simply injected their internal politics into the larger organization rather than enable CCS to leverage their existing businesses and social networks. In most cases, only a subset of a youth group's members participated in CCS while the rest operated the pre-existent businesses and engaged in other non-commercial activities. This internal division of labor – and in a sense, divided loyalties – led to continual clashes between CYE's leadership (which consisted of a committee with representatives drawn from each youth group) and each youth group's original leadership.

A few weeks after the business launch, when on-the-ground activities basically ceased, CYE became largely inoperative. The field team (at the time led by George) focused its efforts primarily on those groups whose entire membership was committed to CCS, and began to manage each group

separately. So once the business was operating, it was for the most part each operating youth group on its own, without paying any attention or dues to CYE. During the first year of operations, the field team continued to respect each youth group's existent identity and manage it as a coherent group that could manage its internal operations. Thus, for example, their uniforms would bear the SCJ, CCS, and youth group logo or name; and SCJ product would be delivered on consignment to the groups, not to individuals. The breakdown of CYE and the organizational and logistical issues that arose from dealing with groups of fluid membership and shifting hierarchy led Justin to realize that CCS might function more effectively as a micro-franchise model which would admit single entrepreneurs or entrepreneurs willing to hire other people and form their own commercial organizations. Duncan was opposed to the single entrepreneur model because of what he perceived would be its diminished capacity for providing meaningful social benefits and the loss of community embeddedness.

The urgent need to streamline and simplify the management structure, and Joseph's preference for dealing with single entrepreneurs rather than groups, consolidated the shift to a micro-franchise model. The model promised several advantages attractive to SCJ and potential franchisees. Firstly, it was hoped that franchisees with more traditional entrepreneur-based or boss-employee structures would suffer much less from the squabbling and consensus-based decision making that resulted from the flat hierarchies of the youth groups. The field team would then only have to deal with a single franchisee or entrepreneur, not facilitate the decision-making process of an entire group. A second advantage would be that the franchisees would be committed only to CCS – the youth groups' other businesses and non-commercial activities

usually distracted from CCS or clashed with it. A third reason for shifting to a franchise model was to enable the field team, now lead by Joseph, to transition into the role of a self-sustaining “master-franchisee” in charge of managing the business in the whole city or country. In this manner, SCJ would be able to develop a BOP distribution channel of sorts without having to own or operate it itself.

Franchisees would accrue benefits on several levels. Firstly, their incentive structure would be much more transparent and direct. Franchisees who actually worked would handle revenue directly and only pay for their direct costs, they would not have to share their profits with other group members who did not participate but were higher in the group hierarchy or “owned” the clients. Secondly, the franchise structure opened the opportunity for participating to the whole community. Individuals would not have to already belong to an existing group or need to become a member of a group in order to become part of CCS and have an opportunity for generating personal income.

After the first year of CCS operations, only three youth groups remained operational. The two groups using the in-home cleaning service business model stopped operating during the course of the second year. Given these circumstances, the field team decided to recruit new franchisees. The first franchisees were individuals in Mathare that had been in some way related to Pequeninos. These entrepreneurs simply picked up the contract toilet-cleaning model and implemented it with a shifting team of friends or employees whom they paid on a service-per-service basis. Thus, the management team only had to deal with the lead entrepreneurs who then assembled their teams as needed.

The toilet cleaning business was relatively straightforward and profitable for the new franchisees, but because the in-home cleaning services one had not evolved into a profitable proposition for the youth groups trying to implement it, it proved more difficult to recruit franchisees for. The field team leveraged its relationship with CFK and with another local NGO to contact potential franchisees (both individuals and existing self-help groups), but was unable to recruit anyone for the in-home cleaning services model. In the course of the second year of operations, the in-home cleaning model was dropped from CCS.

Expanding the toilet cleaning business required finding low income communities that also had Mathare's "shared toilet" structure. In September of 2007, the field team recruited a youth group in a new community that met this criterion. Even though dealing with a pre-existent youth group contradicted some of the reasoning behind the shift to the micro-franchise model, the field team moved ahead because it had not been able to recruit individual franchisees outside Mathare. The new youth group, called Montana, appeared to have a strong and entrepreneurial leadership which could act as a franchisee; and it operated in a community that had shared bathrooms and wanted them serviced. Initial operations with Montana were pretty successful, but over time, the aforementioned internal group dynamics issues emerged – and together with the loss of key members who moved away – the business's development slowed down. In addition, the community, being quite self-contained, did not have enough shared toilets for the business to grow to a size where it could provide sufficient income for all the members of the group. To summarize, over the course of the second year of operations CCS morphed from a coalition of existing youth groups co-opted to offer door-to-

door in-home cleaning services to a micro-franchise model of individuals and small entrepreneurial teams cleaning shared toilets on a contract basis.

Reorganization of the administrative structure

When the original student team left Kenya in July of 2005, Erik had to quickly cobble together an administrative structure to keep the initiative moving forward. Over the fall of 2005 he devised a structure meant to support the youth groups' business development efforts on the ground while simultaneously avoiding the deployment of full-time SCJ personnel to the field. The youth groups were to be supported and led by a field team of independent contractors (Edwin, then Kimeu) legally working for CFK. In January of 2006, SCJ added an unpaid intern on a half-time basis to the field team (John). The field team was to be guided by Salim, CFK's Executive Director for Kenya; Joseph, SCJ's Director of Operations for East Africa; and Antoine, SCJ's General Manager for East Africa – all of them based in Nairobi. This management tier would in turn liaise with Erik, who controlled the budget. Erik reported to the upper echelons of SCJ: Scott and Mark. Figure 3 shows this structure.

The initiative was ultimately funded by Scott's department, which was hierarchically separate from SCJ East Africa for which Antoine and Joseph worked, and most funds were directed to Kenya through an outside organization, CFK. This structure was a result of the particular manner in which the initiative had come into being – it had started as a collaboration between Scott's department and an external consortium, SCJ was unwilling to hire personnel in Kenya at the start, a non-SCJ employee had been the initiative's leader its first two years, etc. – and thus proved unwieldy for several

reasons. First of all, the initiative's main driver was not part of the field team, was not located in Kenya, and was not a part of SCJ. Secondly, the field team did not have an experienced enough leader that could guide the youth groups through the very ambiguous process of creating and cumulatively modifying an innovative business. The management tier with the right level of capacity (in yellow in Figure 3) to lead such a venture only dedicated a few hours a week to it.

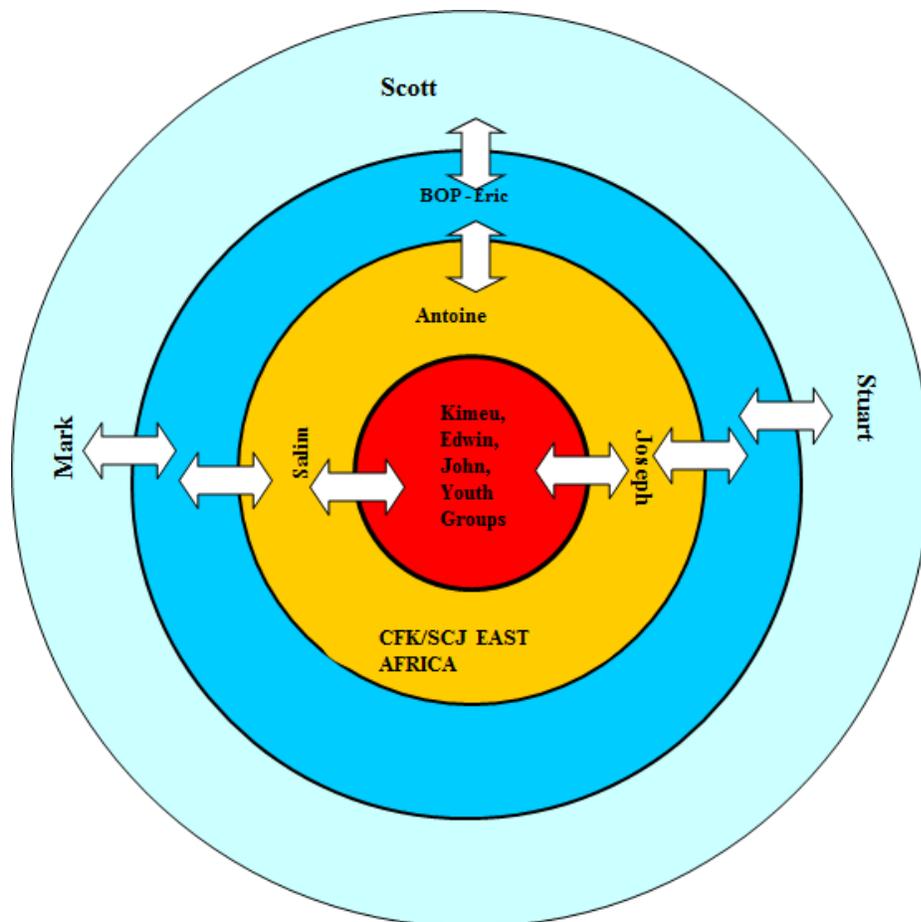


Figure 3 – Administrative structure of CCS in the fall of 2005, from an internal document prepared by Erik Simanis.

A third source of awkwardness stemmed from the tangled lines of authority that resulted from having the field team respond to “bosses” from three different organizations. This was reinforced by the way the budget flowed and was controlled, and by each field team member’s original organizational allegiance and paycheck source.

With this structure in place, Erik handed the project off to Duncan in the spring of 2006. Duncan began operating under this structure, but with the objective of streamlining it and handing the project’s leadership to Justin, now an SCJ full-time employee. Over the course of the first year and a half of CCS operations, Duncan transitioned the overall leadership role to Justin. In the process, they strengthened the field team’s leadership by hiring Joseph, and streamlined its administrative procedures by internalizing the fund flow within SCJ and shifting CFK to a social auditor role. Figure 4 shows the administrative structure in the summer of 2007 and Figure 5 shows the administrative structure in fall of 2007.

In this period, SCJ’s operations in Africa were restructured and its Kenya offices drastically reduced in size. As a result, the SCJ manager for all of Africa – based in South Africa – took over for the East Africa manager in CCS (Miguel in Figure 5). Joseph was repositioned; from being a consultant, he shifted to become the field team lead – now as an independent contractor – and George left the team, slated to be replaced by a new hire.

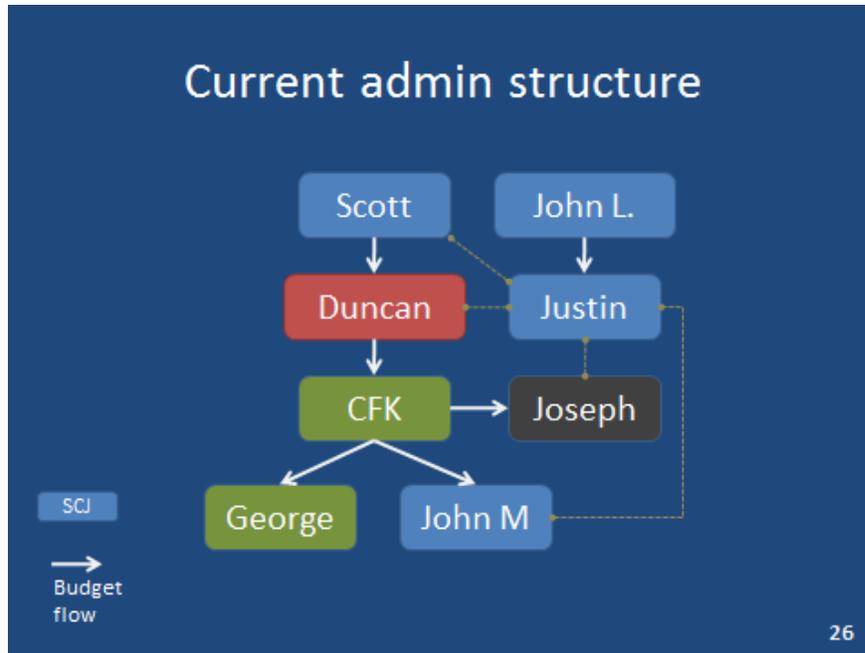


Figure 4 – Administrative structure of CCS in the summer of 2006, from an internal report prepared by Justin DeKoszmovszky and Duncan Duke.

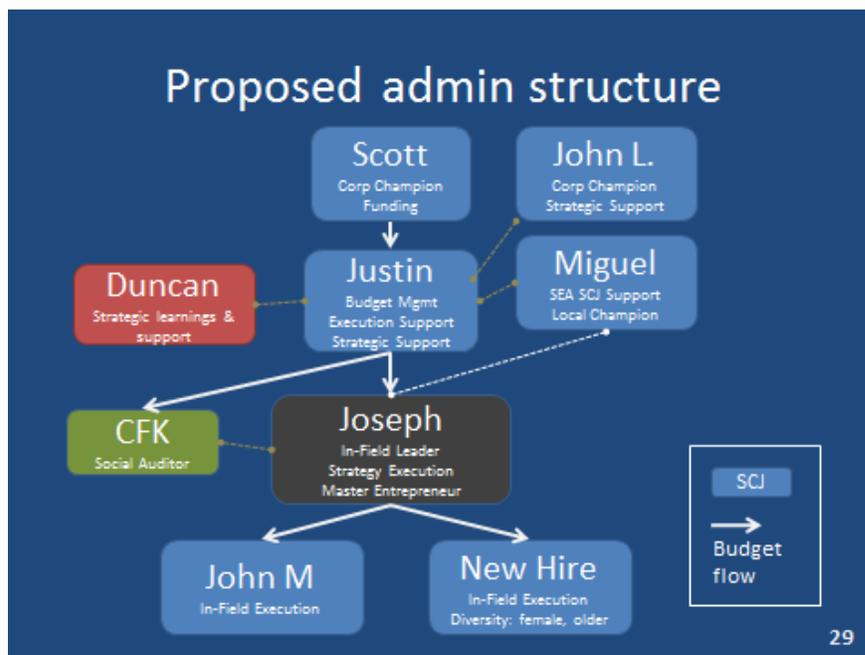


Figure 5 – Administrative structure of CCS in the fall of 2006.

AFTERWORD

In 2008, SCJ initiated the internal processes necessary for providing low-cost, bulk versions of their cleaning products to CCS. Justin coordinated with an SCJ production facility in Egypt to have a container of Toilet Duck (a product for cleaning toilets) in bulk format exported to Kenya. Joseph gradually moved from being a consultant to the project to becoming SCJ's "master franchisee" in Kenya, in charge of managing CCS as a separate and independent unit.

Joseph set up facilities for receiving SCJ's bulk product and then repackaging it within Kenya in the format best suited for providing toilet-cleaning services within the slums. Joseph and the field team had some difficulty initially finding individual entrepreneurs willing to join CCS. They eventually joined forces with another local NGO (Pamoja Trust) with deep ties across Nairobi's urban slums. Through Pamoja Trust, the team was able to identify and induct into CCS several youth groups in different urban slums.

Over time, the business model bifurcated again. One contingent of CCS continued to clean shared toilets within the slums, while another cleaned and maintained for-pay public toilets. Not all the for-pay toilets were located in slums, but they all tended to have very high traffic and use; thus they had to be cleaned daily. This model's revenues come from the fees that customers paid for using the public toilets. Each set of public toilets is typically owned or operated by an existing business or NGO, CCS's role was to train the operators in cleaning and maintenance in exchange for using SCJ products.

Current efforts revolve around streamlining the process of importing and distributing bulk product and strengthening Joseph's "master franchisee" organizational infrastructure so that it may become entirely self-sufficient and independent of SCJ.

CHAPTER 6

CASE STUDY: ACB IN TIERRA SANTA

AUTHOR'S NOTE

ACB is a pseudonym for the second firm of this study. Due to intellectual property and trade secret issues, the full “thick description” of the case cannot be published in this dissertation, even in a disguised form.

What follows is a brief overview of the firm and the case, culled from publicly available information. This overview uses the same pseudonyms used the in the full case study for the firm, individuals, organizations, countries, regions, cities, industries, technologies, and health issues so that it is consistent with the examples and references to the case in the Discussion and Conclusion Chapters.

Readers interested in the full “thick description” of the case are encouraged to contact me (dod3@cornell.edu) to discuss the required arrangements needed with ACB to gain access to the full version. The complete case is 115 pages and covers in detail the evolution of ACB’s business development efforts in Tierra Santa during 2008.

OVERVIEW

ACB Inc. was formed in the United States with the express purpose of developing a suite of technologies specific to a widespread healthcare problem – one that mainly affects the poor across the globe – and commercializing its products through the development of innovative business models in partnership with low-income (BOP) communities of developing countries. The firm was founded by Larry, an accomplished entrepreneur who

had initiated or been a primary participant in more than a dozen successful ventures, some of them with exits valued in the hundreds of millions of dollars. Larry recruited a team of principals to his senior management team that included among others:

- Charles – an international consultant with extensive experience and contacts in the Latin American development community.
- Robert – an entrepreneur and tenured professor in material science, expert on the physics of the base technologies ACB wanted to develop.
- Ian – a tenured professor, expert on business innovation processes for low income markets.

During its first year of operations, the firm solidified its corporate structure and began researching and developing innovative technological solutions to three problems underlying the target health-related issue – the Parasite, Virus, and Vitamin problems. Conventional solutions in developed countries to these problems are based primarily on large-scale, centralized systems that have been implemented over decades at huge cumulative costs, are inherently inefficient, and environmentally unsustainable.

ACB's core objective has been to develop technological solutions to these problems that are low-cost, environmentally friendly, distributed, and adapted to local social and environmental conditions. ACB's co-creates these solutions with its intended BOP customers and partners; this includes co-designing the platform itself, as well as co-creating local business models centered on it. ACB focuses on creating "community pull" rather than "product push" as its basis for market development.

At the start of its second year of operations, ACB selected a Latin American

country – Tierra Santa – as the initial location for incubating its first business. In January, the firm hired a manager experienced in collaborative and immersive business development at the BOP – Daniel. Daniel was tasked with hiring, training, and deploying two separate field teams to Tierra Santa.

The first field team was deployed by April of that year to Palma, a community within the metro area of Madeira that suffered acute Vitamin problems. The field team was composed of six people, including an overall leader and a technology specialist. The team was supplemented at times with consultants and individuals hired on a temporary basis. The field team set up an office within Palma, and its leaders and some of its members relocated to the community for the first months of operation.

After three months of immersion, the field team and Daniel had developed ACB's initial business concept in partnership with Palman community members. The concept envisioned an ACB-provided in-home technology platform that dealt with the Vitamin problem, coupled to a social support network that would enable people to use the platform as a lever for creating and establishing healthy lifestyle habits. Through a network of community-partner hosted "healthy dialogue groups" (HDGs), ACB would distribute its technological solution and also enable its local partners to develop and provide complementary products and services that help consumers save money and establish healthier lifestyles. The services and the HDG activities would be synergistically tied to community greening and beautification activities designed to extend and position the ACB brand in the broader community.

In July of 2008, ACB hired a Chief Operating Officer – Lance. One of his first tasks was to liaison with Robert's R&D team (based in the US) to marry the

design parameters emerging from the immersion team's fieldwork with the technology development focused on the Vitamin problem.

The second semester of 2008 saw lots of prototyping activity, with initial prototypes produced in the US, but evermore prototyping and testing work devolving to the field team. Simultaneously, the field team began work with a core set of about twenty community partners to develop the organizational infrastructure for implementing the business concept. Early activities focused on getting alignment around the business concept and developing two of its main components: the Health Dialogue Groups, and the initial set of complementary goods and services.

During the last trimester of the year, as the Palma field team awaited the arrival of the first non-prototype units, it accelerated the development of the Health Dialogue Groups and complementary products. By spring of 2009, ACB's community partners had developed, test-marketed, and were already producing and selling a range of innovative complementary products to the Vitamin technology platform.

Once the first units were delivered to Palma, the field team activities shifted to honing the structure and function of the HDGs, developing an initial payment/billing system and accompanying infrastructure, growing and solidifying the complementary products business, establishing the logistical and technical basis for delivering and maintaining the units in the field, growing and specializing the field team, and preparing the market for rapid deployment of large numbers of units in the fall of 2009.

In late fall of 2008, Daniel trained and deployed a second field team to another city in Tierra Santa – Medina. The aim of this field team was to develop a scale-out version of the initial business concept in an unconnected location,

but with a different core technology, one focused on resolving the Virus problem. The Medina field team's four members opened up an office in a low-income urban and set out to engage the community and recruit a set of community partners for launching the business. In the winter of 2008-2009, this team co-created with its community partners a business concept which paralleled the Palma business concept. In late spring of 2009, the team began the process of implementing the concept, focusing first on the development of complementary products and services tailored to the Medina community and the Virus problem. Concurrently it worked with Robert's R&D team through Lance to develop the technological platform that could deal effectively with the Virus problem.

Eventually, ACB expects to develop a business model focused specifically on the needs and requirements of higher-income demographics, but in 2009, its focus remained on scaling out the businesses across the Tierra Santa BOP. In time, the company aspires to expand throughout Latin America, and as it does so, it will continue to adapt and evolve its business models to fit the conditions of the communities in which it does business.

CHAPTER 7

DISCUSSION

In the Theory Development Chapter I presented a framework for examining opportunity construction processes and discussed the differences between the opportunity construction and opportunity discovery logics inherent in competing streams of research. In subsequent chapters I examined the cases of two firms that deployed field teams to low-income communities to create innovative businesses; that is, businesses with the double goal of being profitable while also providing social and environmental benefits to their local stakeholders.

In this chapter, I inductively build a theory – entrepreneurial sensemaking – by examining the SCJ and ACB cases in light of the opportunity discovery/construction logic dichotomy already developed. In the first section of this chapter I surface and describe the main factors and conditions that induced the emergence of opportunity construction logics in the field teams and the enactment of opportunity discovery logics at the senior management levels. In the second section of the chapter I build the theory of entrepreneurial sensemaking by examining how the interaction between these two entrepreneurial logics generates over time a synthetic logic that enables the creation of novel artifacts and the attainment of deeper understandings of the businesses' strategic outlook and direction.

FACTORS THAT PROMOTE OPPORTUNITY CONSTRUCTION

The SCJ and ACB cases reveal three important factors that promote the enactment of opportunity construction logic (see Figure 6):

- Shared decision-making - The extent to which decision-making regarding the nature and fundamentals of the business is participative, collective, diffuse, and distributed
- Unclear organizational boundaries – The extent to which non-organizational members participate in making decisions about the business.
- Conflicting goals - The dissonance between two main expectations: in these cases, achieving a pre-specified goal while simultaneously producing a novel and innovative business that is socially embedded.

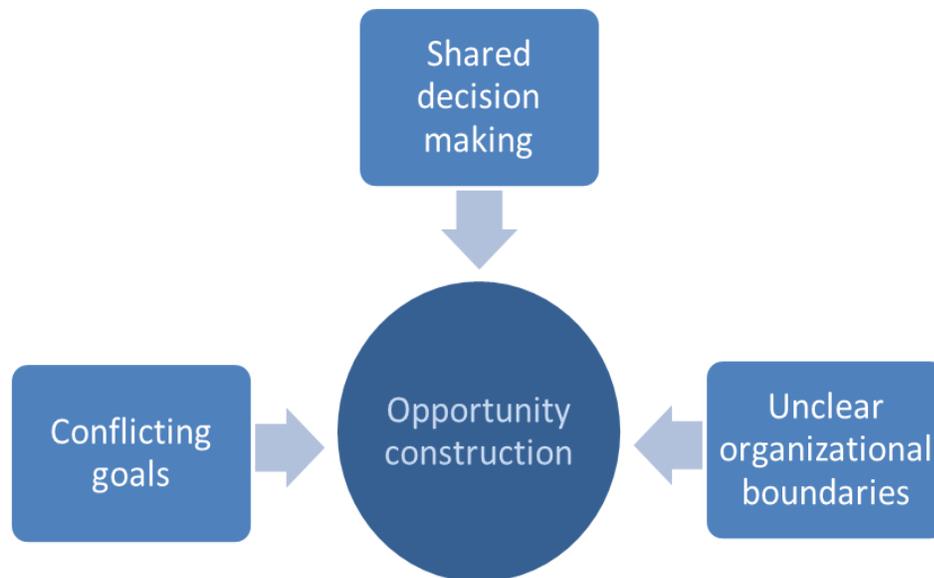


Figure 6 – Factors that promote opportunity construction.

Shared decision-making

Most theorizing on entrepreneurship conceptualizes the entrepreneur as an individual, or places the entrepreneurial function upon a single person's shoulders. This occurs naturally as theorists strive for parsimony in their models and try to identify "underlying causes," "main effects," and "causal relationships"; positing agency on a single entity greatly reduces theoretical complexity. It is also a reflection of a western cultural perspective that tends to stress the individual over the collective (Hofstede, 2001) and of our widespread narrative style of discourse which favors a "Great Man" perspective of history and human action (Carlyle, 1966). Even the literature on corporate entrepreneurship (Burgelman & Sayles, 1986; Birkinshaw, 1997) – which by definition looks at collective entrepreneurship – suggests the need for a "product champion" or a "risk taking employee" to hatch and then lead a corporate venture through its entrepreneurial stage until it becomes an established business. The overall implication in the literature is that entrepreneurial ventures usually require strong leaders to ensure their early success (see Gartner, 1988 for an extensive review). Even when focused on a "behavioral" approach to entrepreneurship – meaning the process by which new organizations get created – most writers tend to inadvertently regress to positing a single entrepreneurial entity as the driver of the process, even when they do manage to avoid becoming embroiled in trying to pin down the entrepreneur's inherent qualities.

In the SCJ and ACB cases, it is clear that the entrepreneurial processes described cannot be ascribed to a single individual. While some individuals play more significant roles than others – for example, Larry is obviously more relevant to the evolution of ACB's business than Paloma is – the outcomes are

shaped by the interactions of multiple actors. This mirrors Garud and Karnøe's (2003) conception of bricolage, in which agency is not only distributed, but is also embedded in the process itself. It also is in accordance with the literature on the social construction of technological systems which provides detailed accounts of the micro-processes that support the emergence of technologies (Bijker, Hughes, & Pinch; 1987).

Moreover, this process cannot be simply modeled as an assortment of individual entities, each making its decisions in response to decisions made by its peers – as in a neural network – because decisions are not only made at the individual level, some are also made at the team or group level, and others for the initiative as a whole. Most of the decisions that affected the ACB and SCJ initiatives were the result of intense negotiation between different people or sets of people, mostly within the firm, but also with external parties. ACB's selection of Madeira as its first site nicely illustrates the participatory, collective, multi-level, and diffuse nature of the decision-making in the venture creation process, as well as the cumulative and critical effects these actions have on the fundamentals of the business.

Within ACB, Larry, Charles and Daniel played the most important roles in selecting Madeira, each individual motivated by different concerns. Each of these protagonists was in turn propelled and constrained by other actors, some within ACB and some without. Larry wanted a site that would appeal to ACERO in order to gain its support. He also preferred the site suffer a Vitamin problem, partly because of Robert's incipient R&D efforts in that realm. Charles, on the other hand, wanted a site that would enable him to leverage his relationships, in particular the one with PERALTA, while Daniel preferred a dense urban site with a strong population of potential immersion partners. The

decision to launch the first field team in Madeira was not arrived at lightly, or by mechanical means such as rank-ordering priorities, or by fiat. It involved numerous conversations, field trips, consultations with external and internal stakeholders, and intense negotiation. Moreover, the decision was not structured as a stop-go one or made at a distinct point in time; it was implemented gradually, with each action building upon previous ones in a cumulative fashion until the commitment to the site was intense enough to render it seemingly irreversible.

The effect of the choice – starting in Madeira – had enormous impacts on the evolution of the venture. First of all, as planned, it fixed the broad technology trajectory ACB would pursue – a solution to the Vitamin problem. But it had unforeseeable effects in other areas. The reduced set of local institutional partners (e.g. FUEGO) forced Daniel and the field team to improvise during their immersion and greatly decreased the pool of local community members ACB would be able to choose from to assist in developing its business model. The local community members ACB was ultimately able to work with – unemployed women and stay-at-home mothers for the most part – greatly influenced the contours of the initial business concept and determined the market segment ACB would target. The socio-economic and cultural structures of the Palma community were also key determinants of ACB's actual business model, influencing decisions around distribution channels, the specifications of the technological solution, and the development of complementary products.

Most of the important decisions in both the ACB and SCJ cases were achieved in this multi-party, multi-level, time-extended fashion. In Mintzberg and Water's (1985) typology of strategy formation, this is closer to an umbrella

or consensus strategy than it is to an entrepreneurial strategy. Table 14 shows a sample of decision processes similar to ACB's initial site selection from both case studies that clearly demonstrate the participation and influence of many actors.

Table 14 – Sample of decision processes that had profound effects on the ACB and SCJ initiatives

Case	Issue	Question	Duration	Participants
ACB	2 nd site selection	Where shall we deploy the second field team?	8 months	Charles, Daniel, Fausto, Lance, Larry, TIERRA
ACB	Medina team selection	Who shall be recruited to the team?	8 months	Charles, Daniel, Fausto, Gabriel, Lance, Trevor, TIERRA
ACB	Business concept development	What shall our business look like?	6 months	Alfred, Amanda, Cecilia, Daniel, Lance, Gabriel, Joshua, Monica, Paola and community members
ACB	Palma immersion process	How will we interact with the community?	3 months	Alfred, Amanda, Cecilia, Daniel, Fausto, Gabriel, Ivan, Joshua, Monica, Paola, Trevor
ACB	Community member recruitment	Who shall we work with?	2 months	Alfred, Amanda, Cecilia, Gabriel, Ivan, Joshua, Monica, Paola
SCJ	Immersion team selection	Who shall be recruited to the team?	3 months	Erik, Gordon, Mike, Scott, Stuart, field team members
SCJ	Initial youth group training	What do the youth need to learn about?	8 months	Antoine, Edwin, Erik, Joseph, Kimeu, Salim and youth groups
SCJ	Official launch	When, where and how will we launch the business?	4 months	Aaron, Antoine, Duncan, George, Kimeu, Salim, Scott, Vivian, CFK and youth groups
SCJ	Decrease the product price	If, when, and how shall we lower the price of the products?	6 months	Antoine, Duncan, George, Joseph, Justin, Scott, Stu, CFK and youth groups

The deployment of a field team further dilutes the locus of decision making. By definition, in a team there is a greater diffusion of decision-making than there is in a strictly hierarchical system, or in a decision making group (Katzenbach & Smith, 1993). According to Katzenbach and Smith's (1993) template:

- Groups have a definite leader; a team has shared leadership roles.
- Groups have individual accountability; teams have both individual and collective accountability.
- Groups discuss, decide, and delegate; teams discuss, decide, and do.

In both the ACB and SCJ cases, the original immersion teams experienced rather extreme and isolating conditions during their first months in the field. Living and working together twenty four hours a day, seven days a week, in communities they were initially foreign to, catalyzed strong internal bonding within the teams, analogous to what occurs in a military squad or platoon that goes through boot camp. But in contrast to military convention, the ACB and SCJ immersion teams were trained to make decisions in a very deliberate and highly consensual manner. This was done so that the teams would first model within themselves the participatory co-creation process they hoped to guide their respective communities through. Thus, especially during the immersion phases of both cases – when the initial business concepts were hatched – decision-making at the field level was very distributed, consensual, and participatory. It involved not only team members, but also their local organizational partners such as CFK, and the community members the teams were co-creating the business concept with.

Diffuse decision-making about the nature of the venture engendered an opportunity construction logic, as opposed to an opportunity discovery one.

Participating actors were forced to communicate and negotiate intensively in order to create and sustain a shared sense of purpose that lent coherence to the process and the venture. In an opportunity discovery mode, a single entrepreneur can identify an opportunity and formulate a plan for garnering the necessary resources to exploit it. Communication and interaction with his team then is mostly about delegation, labor division, and coordination in order to execute the plan. Shared decision-making, on the other hand, injects each actor's goals and concerns into the process; there isn't a single, delineated objective, but rather a search for ways to accommodate different goals within a single stream of action. Resources that may appear objective and undisputable to the individual entrepreneur become open to reinterpretation and amalgamation through the process of negotiation and the search for common ground among parties. The resulting flexibility around goals and resource reenactment enable the collective to shape-shift in order to leverage contingencies as they arise.

For example, the ACB field team had to deal with the unforeseen circumstance that there were no suitable local organizations with which to partner with in Palma. Daniel was initially wary of involving religious actors in the venture creation process, but because the field team's plans were discussed and decided collectively, Gabriel, Fausto, and Ivan were able to incorporate their incipient and personal relationship with the local priest into an unofficial kind of sponsorship which provided some of the social legitimacy the team required at that time.

Unclear organizational boundaries

Creating and maintaining a boundary – a clear distinction between members and non-members – is one of the three critical dimensions that define an organization (Aldrich, 1999). The conventional account of how organizational members are “constructed” relies almost exclusively on hiring practices and subsequent socialization processes – an organization is defined by who it incorporates and how it then socializes them (Aldrich, 1999). Typically, the first employees founders hire are people they or a friend know personally (Reynolds & White, 1997; Baker & Aldrich, 1994). Subsequent hires may be suggested by existing employees (Fernandez & Weinberg, 1997), but as the organization becomes more formalized, traditional human resource practices take over; the firm creates and fills positions that are designed to conform to industry standards and are thus recognizable and attractive to external applicants. The selection of like-minded people and the ensuing processes of socialization, promotion, and turnover then serve to actively maintain the organizational boundary (Jackson et al., 1991).

But as Aldrich (1999) points out, founders recruiting their first employee face a situation that has received little attention in the human resource management literature. What little research there is on the topic shows initial hiring to be opportunistic, informal, and unsystematic; human resource practices are among the last activities to be formalized in growing firms (Aldrich & Ruef, 2006).

The ACB and SCJ cases both show extended periods of amorphous organizational boundaries. This agrees with London’s (2005) study of firms attempting to develop businesses to serve the BOP. In his sample, a great proportion of the firms developed strong relationships with local NGOs in

attempts to incorporate into their efforts personnel with locally relevant expertise and knowledge. In the ACB and SCJ cases, these periods of shifting, ambiguous, and porous organizational borders coincided with the critical stage during which the shape of each business was being collaboratively defined. Unclear boundaries endured at two distinct levels: field team/senior management, and field team/local actors.

To wit, the way in which SCJ structured its immersion team guaranteed confusion about organizational belonging and identity from the inception of the venture. All the members of the immersion team were hired as external consultants on short-term contracts, not a single SCJ employee was seconded to the team. Thus, when in the field, the immersion team members could not represent themselves as “being” SCJ, they had to hedge and say “we represent SCJ”. Outsourcing the initiative also ensured almost full delegation and a great deal of freedom of action to the immersion team. The team was able to disengage from the local partner that had been pre-selected for it, choose how to split into two sub-teams, create a partnership with a new NGO, decide to create a business around SCJ’s products available in Kenya, etc. In many cases, the immersion team explained the rationale for their decisions to upper management after the fact.

Further on in the process, when SCJ’s immersion team had been supplanted by a more permanent field team, each participating individual’s core institutional allegiance remained with the organization from which he or she originally came from. Table 15 shows how the field team remained populated with and led by individuals who were not SCJ employees and did not have their long term careers tied to the firm. In fact, not a single management layer of the initiative was composed entirely of SCJ employees.

Table 15 – Management structure of SCJ’s Kenya initiative over time.

	Immersion phase		Business concept development		Business concept implementation	
	<i>Indv.</i>	<i>Org. affiliation</i>	<i>Indv.</i>	<i>Org. affiliation</i>	<i>Indv.</i>	<i>Org affiliation</i>
Senior management	Scott Stuart	SCJ corporate US Cornell	Scott Stuart Mark	SCJ corporate US Cornell SCJ corporate Africa	Scott Stuart John	SCJ corporate US Cornell SCJ corporate Africa
Middle management	Antoine Joseph	SCJ East Afr. SCJ East Afr.	Antoine Joseph Erik Salim	SCJ East Afr. SCJ East Afr. Cornell CFK	Antoine Justin Duncan Salim	SCJ East Afr. SCJ corporate Afr. Cornell CFK
Field team	Erik Students	Cornell None or misc.	Kimeu Edwin John	Independent contractor Independent contractor SCJ East Afr.	Joseph George John	Independent contr. CFK SCJ East Afr.
Local partners	Youth groups	CFK, own youth group	Youth groups	CFK, own youth group	Youth groups	Own youth group or independent

Furthermore, even the SCJ employees directly involved in the initiative did not report to a single authority or sub-organizational entity. Some worked for different SCJ corporate organs, others reported to operational units. Only one employee, John, was fully committed to the initiative and had all his performance incentives related to it.

Thus, the field team did not function as a wholly-owned business unit of SCJ in which middle managers strive to implement the strategy formulated by top management (Raes , Heiljtjes, Glunk, Roe; 2011). Middle management employees (such as Antoine and Joseph) were especially affected by having to report to different bosses within SCJ with different expectations; one for their traditional roles and another for the BOP initiative.

As opposed to radical transactiveness (Hart & Sharma, 2004) in which a firm engages fringe stakeholders for the express purpose of managing disruptive change and building competitive imagination (.i.e. learning from the stakeholders), the SCJ field team interacted with youth groups, local partners, and community members with the intention of infusing in them a sense of ownership of the creation process and its outcome. So, as the field team worked with local actors to shape the institutions and practices needed to support a new-to-the-world business, the interaction with the potential stakeholders became so intense at times that the endeavor felt like a shared one, and the distinctions between firm members and local stakeholders were blurred.

For example, CYE was created expressly as a vehicle for merging SCJ's and the youth groups' capabilities; CCS was to be its first offspring. But it quickly became difficult to explain who exactly formed part of the venture and what each party's role was. Some youth identified themselves as belonging to CYE,

others to CCS, others to their own youth groups (who had in turn partnered with CYE). Even though CYE was eventually registered as a CBO (community-based organization), it never really attained an independent organizational status with which its members strongly identified themselves with.

The community members' relationship to the SCJ field team was also murky and shifting. At times, the field team – itself composed of individuals with divergent organizational allegiances – was considered an integral part of CCS. At other times, it was treated as an external advisor. Its members were sometimes considered to represent SCJ, sometimes CFK, sometimes they were simply the “BOP” or “BOP-Protocol” representatives.

These shifting allegiances and somewhat schizophrenic organizational identities reduced the field teams' ability to make decisions in a clear and logical order. Each decision had to be evaluated in light of all participants' commitments and differing expectations, as well as the need to keep all parties engaged in the process. Multiple goals and concerns had to be considered and negotiated. Each participating organization recognized different resources as valuable and indispensable. The overall result of this was a tendency to gradually construct opportunities that could deal with all the competing interests rather than simply trying to subdue and align all the organizational identities in pursuit of a single pre-determined opportunity.

Conflicting goals

The SCJ and ACB ventures had double-barreled goals which at the outset were not obviously compatible. Both initiatives were conceived and funded with the intention of providing locally meaningful social or environmental benefits while simultaneously creating functioning for-profit businesses. Furthermore, they were constrained by their parent firms' missions and existing endowments – the ventures were expected to “fit” the firms' existing strategic postures and organizational cultures. In fact, it was anticipated that the ventures leverage and incorporate their corporate parents' capabilities into the resulting businesses. The proclaimed mechanism for bridging these potentially divergent goals was the creation of innovative, new-to-the-world businesses that could marry existing corporate capabilities to local assets and ways of living.

The expectation that these would be functioning businesses that could be scaled up also implied that the communities' or markets' wishes had to be addressed; without demand and willingness-to-pay, the ventures would not be self-sustaining and would be unable to grow. In other words, the ventures were not structured to pursue identified and clearly delineated opportunities in that there was no proven and established demand to be satisfied. While there were very obvious humanitarian imperatives to deal with Vitamin and Virus issues in Tierra Santa, and with pest control and latrine sanitation in Kenya, there was no evidence that the targeted populations were willing to pay to have these issues dealt with. Kenyans had been living for generations in pest-infested huts, and usually preferred to use any additional or discretionary income they had on other pursuits. Likewise, the low-income inhabitants of Tierra Santa had preferred to not pay for available products and services that

solved their Vitamin and Virus problems. On the face of it, the teams were deployed to start businesses around themes and issues for which there were no immediately apparent profit-making opportunities.

The need to reconcile two apparently opposing goals led the field teams to enact opportunity construction logics and focus on the process of building towards solutions, as feasible end-solutions were simply not imaginable at the outset. Given the implacability of the need to generate sales (i.e. to satisfy some kind of customer demand), the field teams had to explore options for different offerings while at the same time pushing to have their corporate “hard” goals be made more flexible.

ACB’s Palma initiative demonstrates this point. At the outset, the field team’s goal, as stated by top management, was pretty straightforward: the team was to build a business around the sale of an in-home or small-scale technological solution to the Vitamin problem. The main objectives of the team’s immersion and interaction with the community, as envisioned by senior management, would be to: understand the price points which would be successful, understand how the technology should “look” in order to be attractive to the segment, recruit locals to be salespeople, and establish a mechanism to “break the trust barrier” that might exist between ACB and the local community. The envisioned social benefit would accrue by the simple use of the technology; as long as customers hadn’t been using an alternative solution, every sale could be counted as another household saved from the Vitamin problem. Upon deployment, the field team quickly realized that households that were suffering the Vitamin problem were unwilling to spend money on a product or service meant to solely address it. Consequently, the team worked to develop a business concept that included ACB’s technological

solution, but which also addressed other needs that community members were willing to pay to have met. The resulting business concept was not one designed to exploit a pre-defined opportunity, it was the idiosyncratic product of the opportunity construction process the field team underwent as it struggled to craft a solution that would conciliate its conflicting goals.

This dilemma can perhaps best be seen in hybrid organizations, those that try to incorporate two distinct institutional logics. Battilana and Dorado (2010) describe the problems microfinance institutions have in trying to reconcile the “development” and “banking” logics that different employees bring to the organizations. The development logic presses employees to retain their mission of providing access to financial services to those excluded from the conventional financial sector (typically the poorest) while the banking logic compels them to fulfill the fiduciary obligations of commercial financial institutions. The pressure towards higher profitability increases the risk of “mission drift” as it is usually more profitable to market products to customers that are already served by the financial sector (i.e. “richer” customers) (Mersland & Strom, 2010).

Both the ACB and the SCJ field teams faced this “mission drift” dilemma. They were expected to create businesses that served the poor, but that were profitable. They were expected to produce meaningful and unprecedented benefits for their clients and local partners, but also create value on a separate dimension for their firms. In Battilana and Dorado’s (2010) analysis, successful commercial microfinance organizations bridged the development and banking logics by constructing a unique commercial microfinance logic. But Battilana and Dorado’s description of this new logic doesn’t show that it resolves the older logics’ incompatibilities, merely that “balances” are found. For example,

the new commercial microfinance logic struck a balance between “maximizing access to the disenfranchised to financial services and fulfilling fiduciary obligations to depositors and investors” (Battilana & Dorado, 2010).

The ACB and SCJ teams were unable to simply search for a middle point or balance between their conflicting goals; one pole was inexistent, there were no extant markets for products and services that provided the envisioned social benefits. In both cases, the field teams’ task became to reframe the issues at hand in a manner that would enable the creation of businesses that resolved both mandates. To do so, the businesses had to become conceptually greater than the simple fulfillment of the pre-defined “needs” (Simanis, Hart, Duke, 2008).

The development of the ACB business concept shows this. As mentioned, the field team’s original mandate was to build a retail business around a consumer-level technological platform that addressed the Vitamin problem. But after some field research and community immersion, the team recognized that demand for this product at a feasible price point would not readily emerge within the target population. Since disregarding the Vitamin-solving product in order to develop a different product altogether that might be readily attractive to the market was not an option for the team, it proceeded to explore ways of increasing the business’s scope in order to link the community’s expressed needs – what locals were willing to pay for and found truly valuable – with the need to sell a pre-specified technological solution. The resulting business concept included ACB’s Vitamin technological platform, but it also included the local development and production of complementary products, a proprietary peer-based distribution channel, and a unique branding strategy built around the greening of public spaces. It was the iterative development and

subsequent alignment of the additional business components that enabled the field team to bridge its disparate goals. The business concept was not simply drawn up during a meeting, but emerged slowly over a five month period of intense learning, dialogue and negotiation with all the stakeholders involved, ranging from potential clients to the ACB's board of directors.

To summarize, inductive examination of the ACB and SCJ cases reveals three distinct factors that promote the use of an opportunity construction logic:

- Shared decision making.
- Unclear organizational boundaries.
- Conflicting goals.

The examples show that these factors were more prevalent and exerted stronger effects at the field team level.

FACTORS THAT PROMOTE OPPORTUNITY DISCOVERY

The SCJ and ACB cases point to three factors that contribute to the actualization of an opportunity discovery logic (see Figure 7):

- Mediated relationships - The extent to which the decision-maker interacts with external stakeholders through other people.
- Use of abstractions – The extent to which decisions are made based upon “data” abstracted from the operational environment.
- Organizational tenure – A proxy for the extent of socialization to extant normative organizational logics a decision-maker has been exposed to.

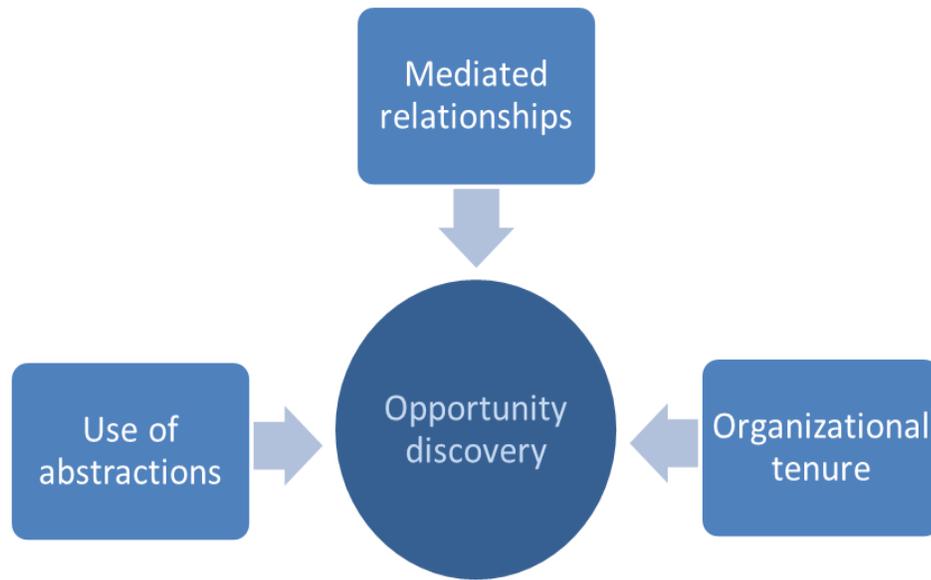


Figure 7 – Factors that promote opportunity discovery.

Mediated relationships

In contrast to face-to-face shared decision-making which inserts each party’s goals and concerns into the process and requires quick in-the-moment agreements, compromises, and mutual understandings, making decisions in isolation – or removed “from the action” – permits a sense of detachment and facilitates the dismissal or minimization of opposing or contradictory demands and viewpoints. When actors interact with the business environment through others, they inevitably establish filters for the information that flows to them. These filters – which generally are subordinates – have several effects on the flow of information.

First of all, they reduce the total amount of information that gets transmitted. Agents on the front line simply cannot convey the wealth of codified and non-codified information they absorb while dealing day-to-day with clients, vendors, suppliers and other stakeholders. They necessarily have to select what

information is relevant to share with their superiors and colleagues and can be transmitted in relatively short and stylized exchanges, such as meetings, conference calls, or memos.

Secondly, and as consequence of having to parse and curate the information flow, the filtering subordinates pre-process the information in idiosyncratic ways. They have to try to “filter out the noise” and frame the information in ways they think their supervisors “want to hear” and will be liable to act on. They also have incentives to present information in ways that will support – or at the minimum not detract from – their own personal and organizational interests (Guth & MacMillan, 1986).

Thirdly, in mediated relationships, the information gets “metered” or “chunked out”. While frontline employees usually have to make decisions on-the-go to deal with stakeholders’ concerns and interests in real time, their superiors often have the opportunity to make decisions at a more leisurely and controlled pace. Top managers usually do not have to make decisions immediately, as soon as they receive memos, reports, phone calls, or e-mails. They can let the information accumulate, analyze information from several sources concurrently, and postpone their decisions. In fact, they can even schedule their decision-making in advance, as in “marketing decisions get made after the Thursday operational review meeting”. On the other hand, senior decision makers receive information in “lumps”, as in e-mails, weekly meetings, or monthly budgets; they do not have fine-grained access to the continuous flow of information occurring at the firm’s interface with the environment.

In sum, mediated relationships reduce, pre-digest, and meter the information provided to the decision-maker. Less information reduces the competing

demands that have to be conciliated. Also, not having to deal with the stakeholders in person, the decision-maker is shielded from the emotional pull to consider and equally weigh all competing demands. The combination of less shared goals, reduced time pressure, and more streamlined (but sparse) information flows enables second-line decision makers to feel that they are “more objective” or “rational”, dismiss concerns that are not aligned, and construct more linear representations of reality. This naturally supports the opportunity discovery logic of entrepreneurial action in which plans are made and strategies devised to pursue the opportunities uncovered by more formal analysis.

Figure 8 provides a snapshot of how relationships with community stakeholders were mediated within ACB in August/September, once most of the field work for the initial business concept definition had been undertaken and Lance had become fully functional as Chief Operating Officer.

The depicted relationships are strong, indicating at least four hours of direct and intense communication per week. The closer to the field, the more intense and personal were the relationships, with most interaction being face-to-face. The further up the chain of command, the more mediated were the relationships with the business environment. At the time, Lance was three degrees removed from the market. Importantly, the number of relationships also decreases the further one moves up the chain of command.

These mediated relationships are in relation to the market and operational environment of the business, which is the main concern of this study. ACB top managers did have extensive networks and unmediated relationships with other stakeholders, primarily at the institutional and capital markets levels. On those dimensions, the relationships may have engendered an opportunity

construction logic, but that is beyond the scope of this study.

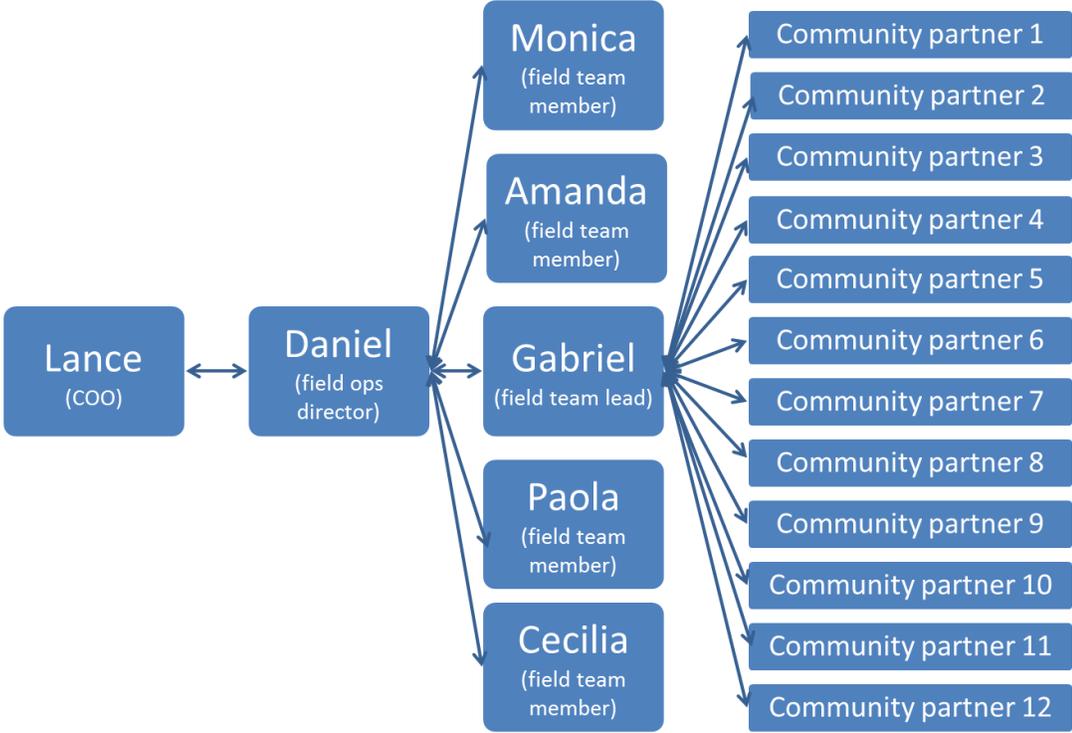


Figure 8 – ACB’s mediated relationships with community stakeholders in August/September.

Use of abstractions

A factor closely related to mediated relationships, and interdependent with it, is the use of information that has been abstracted into higher-order concepts for analysis and decision-making. As discussed in the previous section, managers who are not on the front line have to make decisions based on information presented to them by their subordinates and other external agents. The subordinates not only filter the information, they also manipulate it and abstract it. Abstraction is the process by which higher-order concepts are derived from the usage and classification of “literal” concepts, observed

phenomena, or first principles (Mayer, 1993; Stinchcombe, 2001; Webster's Dictionary, 2000); it is the stripping away of extraneous information in order to leave the bare essentials needed for some kind of operation or analysis. Abstraction indicates a teleological process; actors decide which information to remove from a "concrete" reality dependent on what they believe the resulting concept will ultimately be used for. It also implies simplification; in the process of abstraction, formerly concrete details are left ambiguous, vague, or undefined.

In firms, the information provided to superiors is usually intended for planning and decision-making purposes and is customarily abstracted into numerical concepts that can be manipulated mathematically. Front-line employees are tasked with providing information related primarily to sales (revenue) and to costs. This can take the forms of sales projections and targets, profit and loss statements, cash flow and inventory reports, operational budgets, etc.

Managers dealing with abstractions – in particular numerical concepts – are prone to use the left hemispheres of their brains and make decisions in a more rationalistic, linear, and purposefully analytical manner (Csikzentmihaly & Rochberg-Halton, 1981; Csikzentmihaly, 1996; McManus, 2004). This decision making style is not necessarily more comprehensive than intuitive and judgmental processes (Nutt, 1993). Eisenhardt's (1989b) study of fast decision making supports the notion that being closer to the source and using less abstract information– in her case, real-time information on the firms' environments and operations as opposed to forecasted information – leads to more intuitive and efficient decision making. Fast and effective decision makers preferred operational indicators such as daily bookings of scrap over "more refined accounting data such as profit" and favored face-to-face

conversation rather than time-delayed and mediated communication (Eisenhardt, 1989b).

While not necessarily more efficient or effective, an analytic stance derived of working with abstractions does suggest a positivist “technical rationality” that seeks to identify patterns and impose a linear order upon reality (Schön, 1982). Chambers (1997) suggests that professionals in higher status positions within organizations are driven by ideas, values, methods, and behaviors that are derived more from things rather than from people, and thus focus on quantification. Their working environments tend to be standardized, controlled, and predictable; they prize measurement, universals, reductionism, prediction, and theory over local, complex, dynamic, and unpredictable realities which are what the subordinates in lower status positions that interface with people have to deal with (Lipsky, 1983). In terms of opportunity logics, abstracted information stimulates opportunity discovery thinking; abstractions are attempts to evaluate the environment and make choices based on estimates of its future states.

In ACB’s case, the kinds of abstracted information that were funneled to senior managers varied over time, depending on the maturity of the business. One of ACB’s senior management’s main concerns throughout was securing a second round of financing for the firm. Although a multitude of funding sources were explored, the main reason the firm offered in exchange for support was that it would soon enter a phase of explosive growth fueled by the widespread adoption of its technological platform. While senior management used several types and channels of information to build its case, the kind of information it expected from the field team revolved around price points acceptable to consumers, distribution and customer acquisition costs, and adoption rates;

data that could be plugged into its sales projection and firm valuation models. At the outset of the field team deployment, ACB senior managers knew it was too early in the process to ask for “hard” data around price points and distribution costs, but they did expect tangible data and “insights” that would be indicative of what the Vitamin technological platform should look like and cost in order to be attractive to the market. For example, senior management expected the field team to provide an analysis of the local competitive landscape in regards to existing solutions to the vitamin problem, including competitors’ sales volumes, revenues, and price points, as well as descriptions of their offerings and business models. Later on in the process, as the business slowly began to take shape, senior managers began to require more quantitative data directly related to ACB’s sales, including weekly sales, individual salespeople’s targets and performance, rate of salespeople hiring and induction, etc.

The ACB field team, on the other hand lived in a world dominated by verbal, face-to-face information exchanges with stakeholders. Despite the team’s efforts at disciplined note-taking and structured documentation processes – for example, most activities were photographed and all photos uploaded to a website – it proved very difficult to simultaneously capture, analyze, and summarize all the knowledge the team members were tacitly acquiring. The process of winnowing the information into digestible portions rested heavily upon Gabriel and Daniel; writing reports and crafting e-mails to senior managers was often a painful exercise which required inordinate amounts of time and effort. Gabriel and Daniel often had to discuss at length how to convert the “raw” data of their first-hand experience into compact yet meaningful representations that would be useful to Lance and Larry. They had

to channel and reduce the wealth of contradictory and ambiguous information they were experiencing into pre-existing formats such as weekly reports with pre-established categories, budgets, financial projections, and sales targets. Over time, this process highlighted the costs related to the technological platform and minimized the other elements the field team was incorporating into the business concept in order to make it attractive to the populace – components of the business that not only implied additional costs, but also alternative revenue streams.

As senior management focused on the data provided by the field team to continually create and tweak revenue growth and firm valuation models, it implicitly emphasized the notion that ACB was pursuing the opportunity of a lack of adequate in-home technical solutions to the Vitamin problem and de-emphasized the community's expressed needs, which were much broader.

In the SCJ case, when Community Cleaning Services was formally launched, senior SCJ managers developed – independently of the field team – a series of metrics to evaluate the initiative's performance. Besides sales, these metrics included measures intended to gauge the initiative's broader social impact, such as the number of jobs created in the slums. When the initiative began to falter after the official launch, SCJ's operational culture of measuring performance primarily through profit and loss statements (P&L) came to dominate the information flow between senior management and the field team. Senior managers directed the field team to develop P&L statements for CCS and for each participating youth group. This required all CCS operators report their exact number of sales, the material and product cost of each sale, its price, etc. Yet the operational reality in the slums was not conducive to such clean data collecting. For example, there was little standardization across

services provided, each service had to be customized to the client's particular conditions; CCS operators had lots of difficulty ascertaining product costs per service given the products' packaging and dispensation mechanisms; there was little real incentive and ability to write receipts and faithfully report revenue.

Over a considerable period of time (more than a year), the field team leaders struggled to inculcate an information gathering and processing system within CCS that would produce reliable metrics that senior managers could visualize in the form of a P&L statement. During this process, the focus centered primarily upon sales, costs, and margins, with a continuing debate as to whether CCS should experiment with pricing (especially at a loss) to establish demand and determine willingness-to-pay. The overarching goal of the venture during its second year became to see how much product could be sold via the "prorate a can between several huts" model and whether it could be done profitably. The social impacts of the business became a topic of diminished interest and efforts to measure them faded over time.

Organizational tenure

Established firms develop ingrained routines for dealing with their habitual and regular tasks (Nelson & Winter, 1982) and organizational members adopt their industries' institutional logics – taken-for-granted social prescriptions that represent shared understandings of what are legitimate goals and how they may be pursued (Scott, 1994). Most large firms are viewed as structured entities in which strategy is formulated by senior management and is then implemented by middle management and front-line employees. In Mintzberg & Water's (1985) typology, most firms view themselves as enactors of planned,

deliberate strategies.

The classic separation between strategy formulation and strategy implementation (Cohen & Cyert, 1973; Thompson & Strickland, 2001) agrees with the opportunity discovery mindset. When devising a strategy – which usually means a plan – its creators per force assume a future state of affairs; few firms venture into a new market without formulating a goal, conducting formal market research, analyzing the competitive landscape, pre-designing their product or service, determining production requirements, establishing distribution channels, etc. A great deal of planning and research is conducted prior to a product launch, and firms have developed a wide array of analytical frameworks and tools for doing this – the classical example of such a framework is Porter’s Five Forces (Porter, 1979).

Managers, like other humans, seek to order and make sense of their experience; they construct realities, interpretations, and ways of construing the world (Weick, 1995; Chambers, 1997). The more time managers spend in large firms and the greater the portion of their experience they draw from this environment, the more they acquire its “dominant logic” (Prahalad & Bettis, 1986), including its routines and institutionalized stance towards opportunities – namely, that they are identified and subsequently exploited. Senior managers tend to have longer organizational tenures and be more steeped in an industry’s and firm’s modus operandi, and thus are more inclined to enact an opportunity discovery logic.

The ACB case shows this effect. Lance had decades’ worth of experience as a manager and vice president in large firms that developed technologies related to the Vitamin and Virus problems, albeit primarily for industrial clients in developed countries. Though he joined ACB as Chief Operating Officer when

the Palma field team had already been deployed and was halfway through its community immersion phase, on his first visit to Palma he requested of the field team a traditional business plan – one that had to include a national market analysis, a local market analysis, competitor analysis, SWOT analysis, description of the business, marketing plan, etc. A business plan is the epitome of the opportunity discovery logic. Charles – who had extensive experience as a consultant to large firms and governmental organizations attempting to serve low-income markets – also espoused an entrepreneurial logic that was primarily oriented towards opportunity discovery and exploitation. When Daniel presented the business concept that had emerged from the community immersion phase to ACB’s board of directors and principals, Charles prefaced it with a presentation of his own which characterized the country and strategic partner selection process as highly rational, planned, and premeditated. Though ACB’s senior managers – especially Larry – were very adept at networking at high levels and obtaining commitments to the venture from third parties, they invariably characterized the firm as a provider of distributed technological solutions to the Vitamin/Virus problems – these were the opportunities the firm was exploiting. This is not to imply that ACB’s top managers did not understand that the field team was in an opportunity constructing mode, but the top management’s institutional audience expected information to be portrayed in linear, logical, deductive terms.

In the SCJ case – as described in the previous section – the increasing insistence on the use of P&L statements as the main tool for measuring performance and supporting decision-making paralleled ACB’s shift towards more traditional business analytics. Senior managers who had “grown up” in

SCJ were the main proponents of using P&L statements and of applying traditional analytical tools – that assume the pursuit of a pre-existent opportunity – for managing the incipient venture.

ENTREPRENEURIAL SENSEMAKING

In this section I begin by describing a model of conventional market entry, one that is in accordance with the application of a pure opportunity discovery logic. Next, I present a model of market entry that is more exploratory in nature and better reflects the actions of SCJ and ACB, as well as the Patrimonio Hoy and Cemex cases described in the introduction.

Using this exploratory market entry model, I examine how the factors that promote opportunity construction and discovery logics affected individuals at different hierarchical levels within the firm and the kind of logic they came to primarily espouse. I then build the theory of entrepreneurial sensemaking by examining how the interaction between actors enacting these two entrepreneurial logics over time fed a learning and exploratory process that could produce innovative outcomes with some degree of local market acceptance as well a deep strategic understanding of the new businesses' capabilities and potential.

Conventional market entry processes

Firms enter new product and geographic markets to achieve synergies and economies of scope (Teece, 1980), reduce risk (Helfat, 1988), control agency costs (Williamson, 1975), internalize transactions (Buckley and Casson, 1976; Teece, 1981; Hennart, 2009) and find the optimal use for their resources (Barney, 1991; Mosakowski, 2007). Some models of market entry, such as

Klepper and Simons's (2000), suggest that entry decisions are affected by firms' possession of pre-entry knowledge about their resources and capabilities in regards to the new market (Helfat & Lieberman, 2002).

Figure 9 schematizes the generic and formalized process for new market entry that occurs within established firms, across their hierarchical levels.

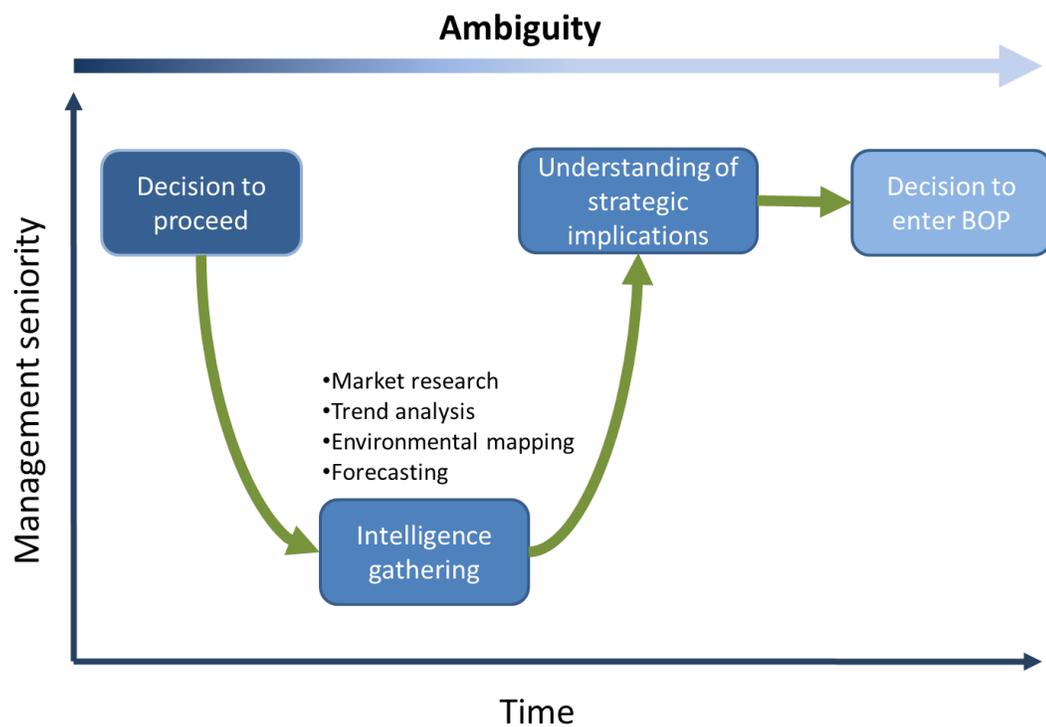


Figure 9 – Within-firm process of conventional market entry.

As entering a new market typically requires the allocation of significant resources to non-routine activities, the decision to seriously explore this option lies with senior management. But once the top management team commits to exploring options for new markets, the detailed exploration work is typically delegated to lower echelons or to outsiders such as consultants. Subordinates or contractors gather the intelligence, conduct the actual market research,

analyze the competition, and generally take actions to reduce the ambiguity surrounding the decision. Once enough information has been gathered to map the environment and determine whether the firm has adequate capabilities to succeed in the new market, it is then senior management that makes the final resource allocation decision to actually enter the market.

This model complies with the separation of strategy formulation and implementation, and epitomizes the opportunity discovery logic. The process is very linear; research is conducted to uncover a potential opportunity which the firm is well positioned to exploit.

Exploratory market entry processes

Not all firms follow the normative model for entering new markets. The ACB and SCJ cases, as well as the Cemex and Honda cases described in the introduction, belong to a second category of market entry modes. In these instances, even though it may be unclear whether a ready market that the firm is well positioned to enter exists, senior managers commit sufficient resources to deploy a dedicated business development unit – or field team – with the mandate of creating a new business to either address a perceived market (as in Honda's case) or to uncover new market needs.

In these cases, senior managers do perceive an opportunity at the outset, usually at a broad and fuzzy level, but with sufficient potential upside for them to allocate the necessary resources to seed a business creation process. It is the business development unit's entrepreneurial efforts to jump-start a business on the ground that begin to provide direction to the initiative and build the experience that guides its subsequent development.

This is a path-dependent process that instead of trying to reduce the ambiguity

around a narrowly pre-defined opportunity increases the depth and complexity of the participants' understanding of what is possible and desirable given the environment and the firm's resources. The learning that occurs as the business is developed occurs unevenly in time and across different organizational layers that have different kinds of exposures to the relevant stakeholders and to the environment. It is as these different perspectives and understandings are negotiated and merged that a deeper and almost intuitive understanding of what the business is actually about emerges. Figure 10 shows a model of this process within a firm.

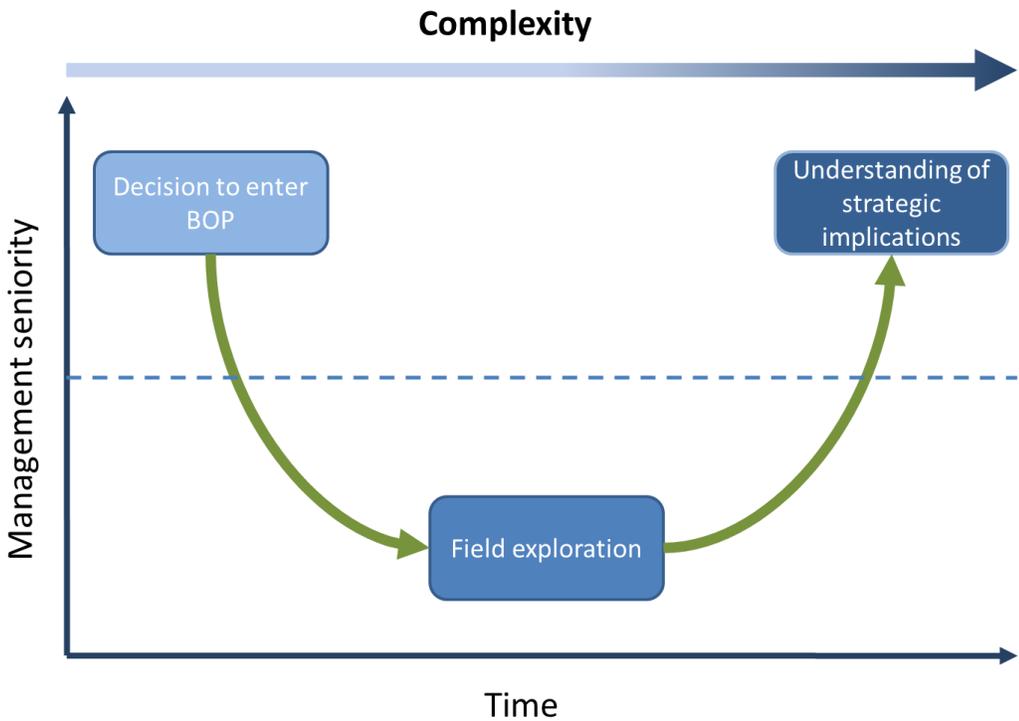


Figure 10 – Within-firm process of exploratory market entry.

Initial entrepreneurial logics

As Burgelman (1983a) evidenced in his study of corporate entrepreneurship, new business development in a firm evolves as employees across different levels of the organization become involved. When a firm uses a dedicated business development unit to enter a new market in an exploratory manner, it inevitably creates divisions within the organization. One of the most important divisions is the separation between the field team and senior management. The field team, having to be “close to market” operates from dedicated offices or facilities which are often in a different country than corporate headquarters. The division is not only physical, but cultural as well. Even if the field team is not operating in a separate country, its immersion and relative isolation in a unique market and stakeholder environment drive the development of an independent sub-organizational culture. The concept of “Skunk Works” is to deliberately isolate a team in order to cut down on bureaucracy and jumpstart an independent, high-effectiveness culture (Rich & Janos, 1996).

In the ACB case, corporate headquarters are located in northeastern United States and all its senior managers reside in the northern part of the country, while the field teams operated in low income communities of a Latin American country. SCJ’s corporate headquarters are located in Racine, Wisconsin, whereas the field team worked in the slums of Nairobi, Kenya. In both cases, site visits by senior management required at least a full day’s air travel. Furthermore, while field team members in both cases lived within or very close to the communities they were working with and had offices or facilities there, when senior managers visited, they were housed in downtown hotels, which they used as their in-country bases of operations.

The composition of each organizational echelon and the different

environments each one inhabits encourage the emergence of distinct entrepreneurial logics. At the start of the process, senior managers tended to espouse an opportunity discovery logic. The factors that promote this kind of logic were prevalent in their situation; senior managers were accustomed to dealing in abstractions, were not in direct and constant contact with the customers, and were steeped in the institutional logic of their industry.

To justify the allocation of resources, the decision to explore the market via the deployment of an immersive business development unit had to be framed externally in terms of a seemingly concrete opportunity. Thus, ACB managers cited the worldwide number of people affected by Vitamin and Virus issues and built their case on the idea of capturing a fraction of this immense and un-served market. SCJ's leadership framed the opportunity in terms of stabilizing the company's supply chain while also learning to serve BOP markets.

But internally, both firms decided to use the BOP Protocol (Simanis et al. 2008) to guide their business development efforts. The BOP Protocol explicitly encourages a logic that is more aligned with opportunity construction than with opportunity discovery. So even before they deployed, the field team members were being trained in practices meant to enable co-creation and opportunity construction. Their immersion in the market and person-on-person relationship building efforts in the field strengthened the factors that promote opportunity construction. In both cases, most team members were relatively young and inexperienced – only one in each field team had significant experience in the firm's industry –and only Joseph (in the latter stages of SCJ's initiative) had any meaningful organizational tenure. In other words, the team members were relatively unencumbered by the “dominant logics” of their industries.

Organizational boundaries were diffuse, extremely so in SCJ's case, and

decision-making quickly became a shared activity – both within the teams and with external stakeholders. Most importantly, as the field team members became immersed in the BOP environments, developing relationships with locals and building personal trust so that a business could be incubated, they in effect became “street level bureaucrats”. Street level bureaucrats are public servants such as policemen, classroom teachers, legal aid lawyers, and welfare workers who are immersed in non-linear environments, with unclear outcomes, and rampant multicausality; they deal directly with the public while coping with large case loads, ambiguous agency goals, and limited resources (Lipsky, 1983). To develop trust and enable community members to participate, field team members often had to accommodate and deal intimately with matters far beyond the scope of the business. For example, Gabriel had to continually interact with the spouses and families of the community partners to ensure they would be given the freedom and domestic support necessary for them to remain engaged with ACB. At SCJ, George had to find ways for the youth group members to move from one slum to another and make sure they were fed before asking them to expend time and effort on the venture.

The position the field teams found themselves in increased their goal tension dramatically. While solving the Vitamin or Virus issue seemed like a commendable social benefit to deliver when designing the business at ACB’s corporate headquarters, it became obvious to the field team members that solving those problems alone would not provide any really meaningful benefits in the eyes of the community members. The Vitamin and Virus problems were at best minor irritants in lives preoccupied with much more pressing matters, or at worst issues so interwoven with other social ills that their solution required major systemic social innovations. A solution to the Vitamin or Virus

issue would certainly not be enough motivation on its own for customers to acquire ACB's products and services at reasonable prices. At that point, the disjuncture between building a business around a Vitamin/Virus technological platform and providing a meaningful social benefit became almost too difficult for the field team to handle cognitively. The result was that it began to operate under more of an opportunity construction logic – focusing on the process and what was immediately possible, rather than on the end goal alone – in an effort to build a solution that could conceivably address both constituencies.

The SCJ field team faced a similar dilemma when rolling out CCS; having clean homes was not something the communities appreciated enough (in light of other demands on their time, money, and attention) to pay the prices necessary to sustain the business. Nor was it clear that having cleaner homes entailed a meaningful social benefit. The field team had to continue its opportunity construction process while simultaneously operating CCS in order to develop a business that showed greater “customer pull”.

To view the situation in terms of strategy and how these different logics could affect the strategic direction of the firms, Hart's (1992) integrative framework for strategy-making processes is useful. Hart proposes a typology for strategy-making processes built around the modes of action of an organization and the differentiated roles of its top managers and its organizational members. In the rational mode – in which strategy is driven by formal analysis – the role of top management is to be the “boss” and evaluate and control the subordinates who are meant to follow the system and implement directives. In the transactive mode, strategy is driven by an internal process of mutual adjustment in which top managers act as facilitators to empower and enable organizational members to learn and improve as participants of the process. In

the generative mode, strategy is driven from the bottom-up by organizational members' entrepreneurial experimentation and risk taking, while top management's role is to endorse and support them.

In the SCJ and ACB cases (see Figure 11), senior managers and the field teams were not operating under a single and coherent mode at the start of the process and when the field teams were in their initial deep immersions. By enacting an opportunity discovery logic, senior managers defaulted to rational and command modes of strategy-making – acting as bosses intent on providing direction, controlling subordinates, and focused on evaluating performance, despite having openly embraced the BOP Protocol to guide business development. The field team members, on the other hand, tended towards transactive and generative modes of strategy-making – seeking to learn by exploring the environment and experimenting in real time.

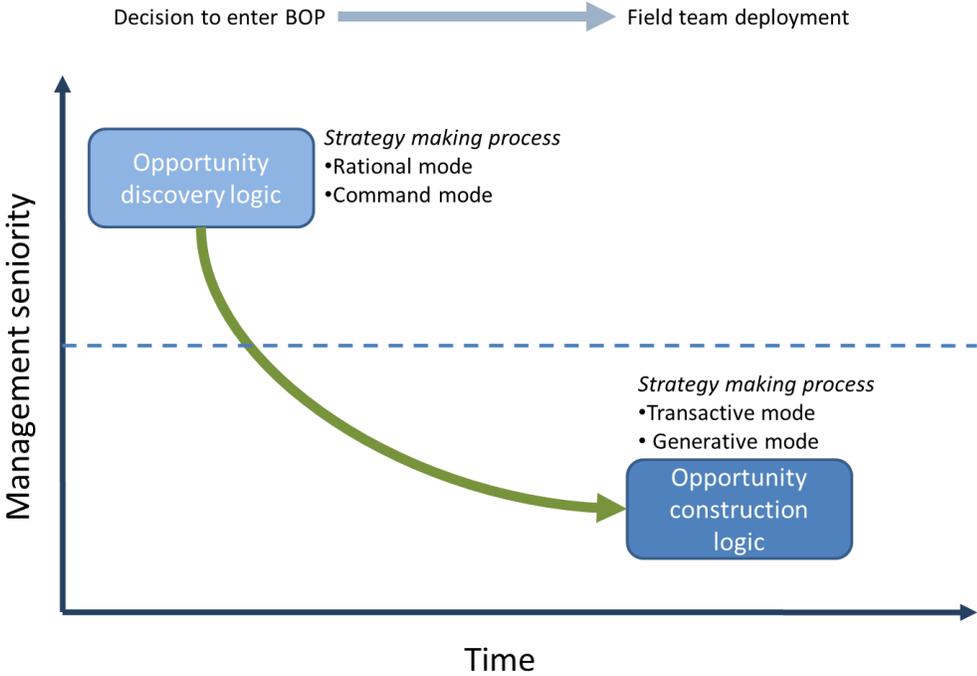


Figure 11 – Initial entrepreneurial logics and strategy-making modes.

Entrepreneurial sensemaking model

The interaction between senior managers primarily enacting an opportunity discovery logic and field team members living an opportunity construction logic is the central process in the development of a deep strategic understanding of what the emerging business can become. In fact, the conversation and negotiation that occurs between these two echelons – as the field team strives to communicate the complexities and nuances of the on-the-ground experience in order to maintain support and ensure that the larger organizational structures necessary for growth are implemented, and senior managers endeavor to keep the field team focused and generating the outcomes needed for gaining external support and legitimizing the venture—shapes the actual structure of the ongoing business in real time.

The example of how SCJ's Kenya business concept evolved over time illustrates this point (see Table 16). At the outset, the intent was for the immersion team to develop a business that in some way helped small-holder pyrethrum farmers become more successful so that the spread of the business would help stabilize the overall supply of pyrethrum. Ideally, the field team would work with Approtec, an existing SCJ partner that already had a technology (human-powered treadle pumps) and a rural business that served farmers.

The immersion team decided to simultaneously pursue an urban option focused on end consumers, in part to hedge against the perceived low probabilities of creating a successful business that resolved the pyrethrum production issue. The business concept creation process in Nairobi's urban slums made use mostly of the opportunity construction logic: the team made do with what it had at hand (use of SCJ consumer products available in

Kenya, despite this not being considered the ideal), created and transformed networks within the slum (through CFK), and made creative use of contingencies as they arose while retaining flexibility around final goal. The resulting business concept – of in-home cleaning services targeted at slum dwellers – presented to senior management was far removed from the initial thrust of the initiative. Yet at the same time, it was an idea SCJ managers could relate to, as it revolved around marketing existing products to end consumers – SCJ’s traditional forte.

Table 16 – Evolution of SCJ’s BOP business in Kenya.

	Time 1	Time 2	Time 3
Business concept	Pyrethrum production enhancement	Home cleaning and improvement services	Contract toilet cleaning and maintenance
Firm goal	Supply chain stabilization	Develop channel for selling existing products into slum markets	Develop new products tailored to slum markets
Social benefit	<ul style="list-style-type: none"> • Steady income generation 	<ul style="list-style-type: none"> • Cleaner homes • Reduced vector-borne diseases • Jobs/income 	<ul style="list-style-type: none"> • Hygienic restrooms • Reduced water-borne diseases • Jobs/income
Local channel	Unclear at the time	Youth groups	Individual franchisees
Target market	Rural small holder farmers	Urban slum dwellers	Urban slum dwellers

Once significant time and effort had been spent setting up CCS, the “opportunity” it was to exploit gradually crystallized and hardened in senior managers’ eyes into pro-rating the cost of existing products – originally

designed for use in single homes – among several slum households by means of a “servicizing” business model. But the initiative continued to evolve. The field team’s experience on the ground compelled it to continue enacting an opportunity creation logic because the in-home service model was not functioning; it did not generate the benefits SCJ required nor any meaningful and sustained social benefits. The field team gradually led – and was led by – the CCS members to focus the business on contract toilet cleaning. The field team’s initial thought was to continue using the existing social structures – the youth groups that constituted CYE and worked in CCS. Senior management, on the other hand, was skeptical about trying to build a business around preexistent and self-formed youth groups because they required lots of facilitation and continuous high-quality management support to remain operative. This impeded efficient scale-up of the business and did not fit SCJ’s managerial structure. The field team’s solution to this concern was to gradually shift the business towards a micro-franchise model.

So after two years of working in Kenya to build an innovative business that served the BOP – beginning with a view to impact the production of pyrethrum – SCJ had eventually ended up with an individual entrepreneur micro-franchise model for cleaning toilets on a contract basis.

Drawing on these cases, I term the multi-level, mixed-logics dynamic process of simultaneously building a novel business and developing a deep strategic understanding of its implications and potentialities “entrepreneurial sensemaking”. The name draws from Weick’s (1979, 1995) concept of sensemaking, variously described as: the active two-way process of fitting data into a frame and fitting a frame around the data, the act of converting a world of experience into an intelligible world, or as committed interpretation.

Figure 12 depicts the process graphically.

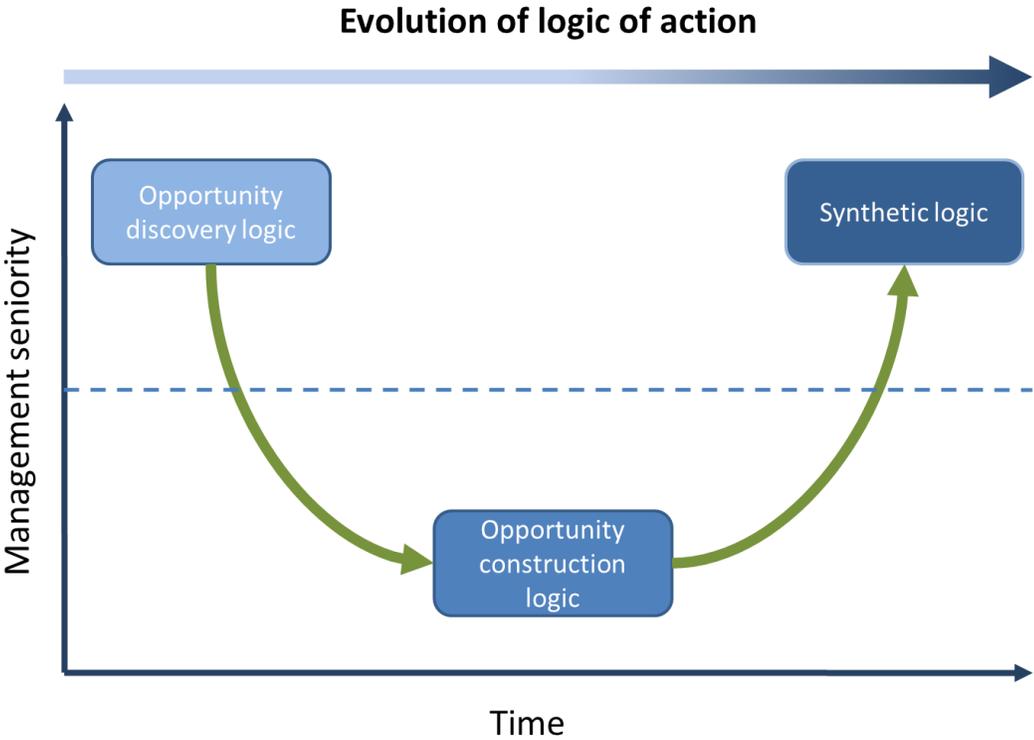


Figure 12 – Entrepreneurial sensemaking model.

If the interaction between the two different entrepreneurial logics within the same organization does not break down, it eventually leads to the development of a hybrid perspective that is able to merge some of the firm’s original goals and expectations with the artifacts that are constructed non-linearly in the field. The resulting synthetic logic is not simply the middle point between the opportunity construction and opportunity discovery logics; they are not opposite poles of a graduated continuum. It is an intricate and path-dependent mesh that contains elements of each of the logics, usually applied at different times.

This mirrors Mintzberg and Waters (1985) examination of intended versus

realized strategies, in which they find that real world experience lies confusingly between the two logics. Mintzberg (1987b) uses the metaphor of a potter managing her craft to illustrate how strategy is best viewed as a combination of deliberate and opportunistic moves that looks to the future but at the same time incorporates patterns from the past. The evolution of ACB's business concept serves to illustrate the point.

As described earlier, the opportunity that ACB's senior management wanted to pursue was the solution to the Vitamin and Virus problems suffered by low-income communities. The Palma field team's main dilemma was creating a business that solved problems that were highly relevant to the community, and would thus be built upon strong demand. The business concept that evolved through the interaction of these two distinct concerns and derivative modes of action did not only cater to the community's expressed needs or simply provide a technological solution to the Vitamin problem; it was a business that addressed both concerns by incorporating elements of each within a broader framework. While a technological solution was at the core of the business, it was wrapped in reinforcing layers that stimulated demand by linking it to several strong community needs and to some of the community's more generalized aspirations. The model included the development of complementary products that not only increased the value of the technological solution in customers' minds, it also stimulated additional economic activity in the community and fomented the growth of a local supportive business ecosystem. The business's main distribution channel was designed in a way that would produce "soft" social benefits and help strengthen community bonds.

Without losing sight of the need to sell large numbers of technological units,

ACB's senior managers broadened their conception of the business and the "opportunity" they were pursuing. Praise from external consultants for the complementary products component of the business helped reinforce the view that creating a business where no market currently exists requires the provision of value and benefits on several dimensions, and that these can be self-reinforcing. The synthetic logic that emerges over time is not finalized as long the underlying conditions hold: the field team remains in close contact with the environment and continues constructing opportunities, senior managers remain somewhat separate from the field team, and the business does not settle into an already accepted category or organizational form (Zuckerman, 1999; Pólos, Hannan, & Carroll, 2002). The dialectic interaction between the logics may continue indefinitely, producing successive synthetic logics and conceptualizations, but the process is expensive to maintain because of the pervasive role conflicts it generates (Battilana and Dorado, 2010). Figure 13 depicts the ongoing process of entrepreneurial sensemaking graphically.

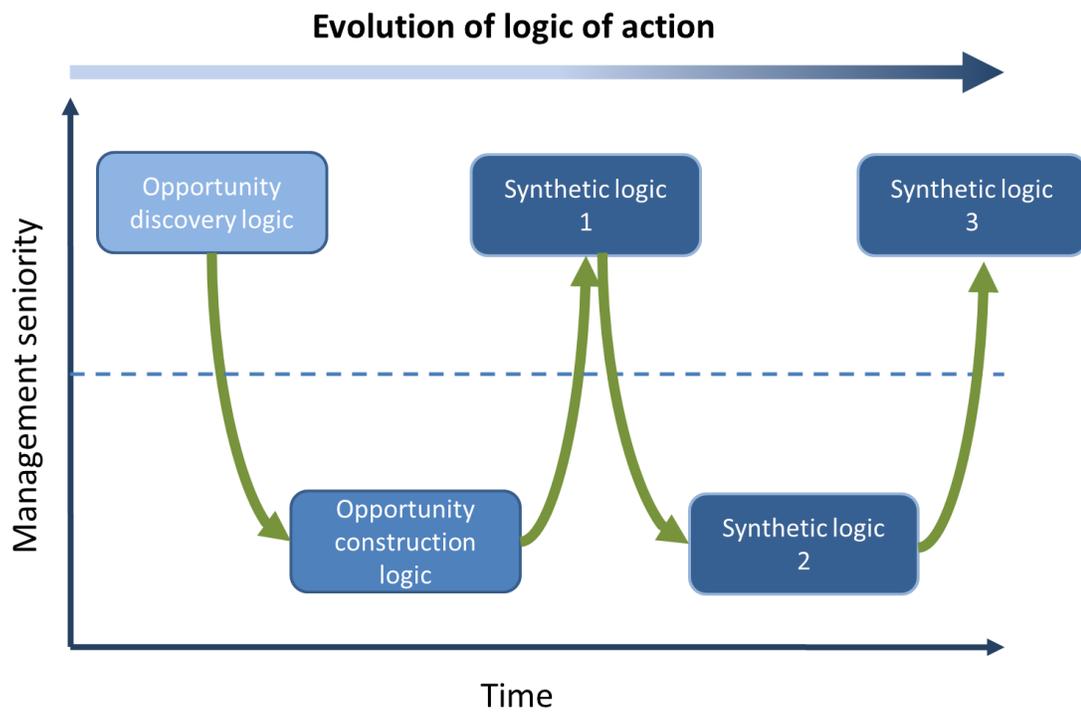


Figure 13 – Successive waves of entrepreneurial sensemaking.

CHAPTER 8

CONCLUSIONS

The main objective of this dissertation is to improve our understanding of how novel businesses are built in the absence of established markets and associated consumption behaviors. I looked to the BOP as this space – where there are no existing services or products like the ones the innovating firms plan to offer – and to western firms as the initial drivers and backers of these ventures.

The main strength of this study derives from its field work and in-depth observation of the process of business creation. Researchers have been calling for this kind of research into entrepreneurial processes for some time; Gartner (1989) says “researchers must observe entrepreneurs in the process of creating organizations; this work must be described in detail and activities systematized and classified”.

The alignment of the research question with the ethnographical research approach, together with the specific ventures selected for study, has produced substantive contributions to four distinct theoretical domains: BOP strategies, entrepreneurship, strategy process, and innovation processes. The study’s hands-on nature, in conjunction with the examined firms’ approach to grounded innovation, has also generated implications for entrepreneurial and management practice.

CONTRIBUTIONS TO THEORY

The framework for examining opportunity construction developed in the Theory Development Chapter, and the entrepreneurial sensemaking theory from the Discussion Chapter speak directly to the emerging literature on strategies for sustainably serving the BOP. Specifically, they help describe and inform the strategy development process that occurs when firms decide to innovate “with the BOP”, or apply “next generation strategies” (London & Hart, 2011).

To the broad academic field of entrepreneurship studies, this dissertation provides a unified framework for examining how opportunities are constructed, as well as insights into two fundamental questions:

- Who is the entrepreneur?
- What conditions drive opportunity construction?

By focusing on the internal workings of firms, this dissertation also contributes to our understanding of strategy process. Specifically, entrepreneurial sensemaking describes a unique form of strategy development which is not bottom-up (Mintzberg & Waters, 1985), nor middle-up-down (Nonaka, 1988), but a *bottom-up meets top-down* process.

Lastly, this work provides insights into a specific innovation process. Bridging the ideas that radical innovation has to be incubated in isolation from pressures of existing, everyday businesses (Christensen, 2000), and that innovation occurs specifically through technology brokering and the bringing together of distinct “worlds” (Hargadon, 2003), entrepreneurial sensemaking shows a dynamic process whereby these two tendencies – to develop in isolation, and to create bridges between isolated groups – are negotiated in a

business innovation process. I conclude the section with some new questions this study has helped generate, and thoughts on avenues for future research.

Strategies for the BOP

The academic literature on the BOP is relatively recent. Despite the fact that some efforts at applying business principles to resolve social problems can trace their roots to the 1970's – such as the Grameen Bank – the term “BOP” was coined by Prahalad and Hart in 2002. Most of the subsequent research and publishing on BOP strategies and approaches – although central to many firms' and entrepreneurial ventures' practice – still remains at the periphery of mainstream management academia. The initial writings on the BOP were more aspirational than analytic or evaluative; the seminal article was titled “The Fortune at the Bottom of the Pyramid” and strove to draw managers' attention to this demographic by portraying it as a vast untapped market.

Prahalad's (2005) follow-up book touted the benefits multinational firms could bring to the BOP by: giving the poor dignity and choice by “converting” them into consumers, creating the capacity to consume, deskilling work, educating consumers, achieving new price-performance levels that are “value-oriented”, building governance capabilities among the poor, reducing corruption, and providing the poor with “identity” by enmeshing them in a firm's closed consumption system.

Consequently, the early corporate efforts to serve the BOP were couched in top-down and economic terms. The main goal was to design and provide services and products to the needy that solved “problems” as defined by the corporations and their partners. This approach naturally leveraged managers' existent product and consumer-centric mindsets; the BOP was seen as a

coherent market to simply be tapped with new products, and people at the BOP were one-dimensionally conceptualized as consumers. London and Hart (2011) term this approach: “finding a fortune at the BOP”; in the introduction, I characterized it as “business for the BOP”.

The initial corporate attempts to “crack the market” were for the most part unsuccessful economically, unable to scale quickly, or did not produce the desired poverty alleviation effects. Inadvertently, in their haste to apply “business thinking” to solving the world’s problems, many firms simply exported to the BOP many of the downsides of a mercantile value system – a focus on material wellbeing and consumption, many times at the expense of community resilience and local knowledge. This trend came to a head with Karnani’s (2007) critique of Unilever’s marketing of “Fair & Lovely” skin whitening cream to Indian BOP consumers under the guise of providing a meaningful social benefit. At that point, the BOP movement was perceived by some to be at risk of simply becoming the next wave of corporate imperialism (Hart, 2010).

The reaction to this initial wave of BOP ventures has been a call for “next generation” business strategies for the BOP (London & Hart, 2011). In 2004, London and Hart presciently proposed that “MNC managers and academics must move beyond the ‘imperialist mindset’ that everyone must want to look and act like Westerners” and acknowledged that western firms’ existing products, resources bases, mindsets, and capabilities might not be adequate for truly serving the BOP sustainably. Mirroring the term “business with the BOP” developed in the introduction, London and Hart (2011) call this proposed approach “business with four billion”.

Some of the strategies that have been proposed for this next generation

include actions such as: collaborate with nontraditional partners, build local capacity, co-invent custom solutions, create demand, avoid focusing on needs, orchestrate effective low-cost experiments, become indigenous, leverage existing local platforms, create mutual value, build social rather than legal contracts, and reinvent cost structures (London & Hart, 2004; Prahalad & Ramaswamy, 2004; Simanis, Hart & Duke, 2008; Hart, 2010; London, 2011; Simanis, 2011).

This dissertation represents a major step forward in this stream. Most of the recommendations for next generation BOP strategies are derived from disparate cases that were documented and analyzed after-the-fact by third parties who did not experience the processes first hand. Some of the recommendations do not emerge from successful cases, but are counterfactuals deduced from perceived deficiencies and failures. This study builds on this base and extends it by being one of the first to follow in real time and at full depth some of the ventures attempting to deliberately implement these kinds of strategies⁸.

One of its main findings is that firms need to immerse themselves in their target markets for a considerable period of time in order to be able to co-invent, co-create with potential customers, gain locals' trust, become indigenous, build social contracts, etc. This kind of innovation process cannot be implemented effectively at a distance, in a top-down manner, or by hiring external specialists to do it; the firms have to deploy their own field teams to embed themselves in the target communities for extended periods of time.

⁸ See Simanis (2010), "The Anatomy of Market Creation: Insights from the Base of the Pyramid" for another example of a qualitative, in-depth study of the application of next generation BOP strategies.

The corollary to the deployment of immersion teams is the unique strategy development process – entrepreneurial sensemaking – that ensues. Entrepreneurial sensemaking ties the bundle of aspirational BOP strategies to the concepts of opportunity and of entrepreneurial processes – and to their underlying academic literature streams. Using the lens of opportunity discovery/construction enables us to make coherent sense of processes that on the surface appear to be chaotic and aimless. We can examine in detail what these next generation strategies entail and what really occurs when firms try to partner and co-invent with their future customers and supply chain partners.

Other consequences of the immersive business development process are the integration and assimilation challenges the firm suffers as it attempts to nurture and incorporate the new venture it has created that is very different from itself.

This dissertation shows that there is still a lot to learn about strategies for sustainably and meaningfully serving the BOP; and that existing corporations and western firms, with their existing mindsets and operational routines may not be optimally positioned to immediately implement them. Firms require time, resources, focus, and practice to develop this new capability; they require steadfast commitment to undergo and manage an entrepreneurial sensemaking process that helps adapt their vision to the market, and the market to their presence. Furthermore, this study suggests that many of the components of this new required capability are closely related to the processes that are usually associated with *de novo* startups. Consequently, managers looking to implement BOP strategies for their firms would be wise to first look at the capabilities and flexibility required for successfully supporting

startup ventures.

The BOP strategies literature, while originating from core strategy canons and assumptions, has struggled to find a theoretic home. It has been couched in terms of international business (London & Hart, 2004), capability development (Hart & London, 2005; London, 2005), welfare economics (Karnani, 2007) and design thinking (Whitney, 2011). This is the first time that BOP strategies have been examined in terms of entrepreneurship theories – especially ones focused on open-ended processes. It turns out that this theoretical lens surfaces a great deal of insights and understanding – particularly at the granular level – that higher-level strategy theories are unable to provide. Conversely, the examination of BOP strategies with an opportunity construction lens enriches extant entrepreneurship theories. These contributions are discussed in the following section.

Entrepreneurship

The entrepreneurial sensemaking theory and the opportunity construction framework draw heavily from some subfields of the entrepreneurship domain, especially those dealing with open-ended processes. The elaboration of these elements and their fresh recombination with other constructs leads to a number of insights and contributions relevant to the field of entrepreneurship. I discuss below three areas of entrepreneurship to which I contribute: (1) entrepreneurship as a collective endeavor, (2) the elements of opportunity construction, and (3) the contextual elements that favor the enactment of opportunity construction logics.

Entrepreneurship as collective action

As discussed in the Theory Development Chapter's section on the locus of action, and in the Discussion Chapter's section on shared decision-making, this dissertation highlights the collective nature of entrepreneurial action and demonstrates how theorizing around a "solo entrepreneur" (Ruef, 2010) can lead to a misrepresentation of the actual entrepreneurial processes.

In one of the most comprehensive examinations of entrepreneurship as a collective activity, Ruef (2010) uses a "relational demographics" lens to explore organizational foundings. He looks at demographical characteristics of individuals participating in launching a business – such as their age, gender, tie strength, and occupation, as well as the network constraints these attributes engender – to explain how the "average" organization in the US actually comes into being. Ruef distinguishes the roles of different members of these entrepreneurial groups by dichotomizing them along two dimensions: (1) having a significant financial stake in the venture and (2) being a regular contributor to the organization (see Figure 14). In this sociological portrayal of entrepreneurial efforts, it is the owner-managers – those that invest significant time in the business and have a significant ownership stake – that are typically considered the founders, or the focal entrepreneurs. In two thirds of the cases in Ruef's broad sample, there is a single founder, in a quarter of the occasions the founding team is a dyad (typically a husband-wife team), and in less than 4% of the cases are organizations started by a team of three owner-managers (Ruef, 2010). The rest of the members of the entrepreneurial group are described as the "startup assistance network", and much of Ruef's research is focused on how the focal entrepreneurs access, control and leverage the members of this network.

		Regular Contributor to the Organization	
		No	Yes
Significant Financial Stake	No	Consultant, Vendor, or Helper	Employee / Manager
	Yes	Investor	Owner-Manager

Figure 14 – Typology of entrepreneurial group members, adapted from Xu & Ruef, 2007.

So even in Ruef’s much broader conceptualization of entrepreneurship, there remains the implication of a focal entrepreneur – or at most a three-person founding team with equity stakes. Coming from a sociological perspective, Ruef strives to explain the majority of all business foundings (in the US). In fact, one of the criticisms sociologists level at the “business management perspective” on entrepreneurship is that its scholars focus too much on a very small subset of organizational types or founding processes (i.e. high capitalization industries or high-growth firms) and that they often suffer from survivorship bias since they tend to study only successful startup processes (Aldrich & Martinez, 2001; Ruef 2010).

The present study was not designed to elucidate the “average” start-up process, but neither does it look at the same subset of industries and firm types that business management scholars typically study. It does not suffer from survivorship bias, “sampling in the dependent variable”, or “unobserved

heterogeneity” since it analyses cases from their very inception. It purposefully examines a particular kind of start-up process, one in which organizations – rather than individuals – decide to launch new ventures, and do so in new market space.

These conditions have serious implications for the start-up process. First of all, we see that the entrepreneurial group does not form and evolve the same way Ruef’s archetypal entrepreneurial groups do. In the Ruefian start-up process, the focal entrepreneur may partner with his wife or an old friend, borrow some money from an uncle, hire his neighbor’s kid, and get advice from his old boss. The proto-organization then consists of himself, his partner and their employee.

In this study’s cases, most of the actors involved do not hold an explicit equity stake in the business at the outset. In fact, what the ownership structure will eventually look like is extremely uncertain at the start. Given the mandate to create a novel business, the immersion or field team not only has to create a new organization, it also has to simultaneously build the social and cognitive legitimacy the new offering will require in order to be adopted. Thus, the field team also has to develop the necessary supporting social structures and institutional arrangements; this process is more like nurturing the emergence of an ecosystem, rather than midwifing the birth of a single organism. In this process, it becomes unclear who is the focal “entrepreneur” and who belongs to the “start-up assistance network”. A successful effort will likely result in the formation of several organizations, and their ownership structure may be complicated and in great flux.

In the SCJ case, the field team’s efforts – the team itself did not have a single leader throughout – initially led to the creation of two quasi-organizations: CYE

and CCS. The resulting core of this ecosystem had individuals with different organizational origins and identities – from SCJ, the different youth groups, CFK – all contributing significantly to the business, yet none of them with any formal equity rights. No one was the clear owner of the business, but all participated significantly and certainly felt some degree of ownership of the venture. This emergent ecosystem evolved further, ending with the SCJ>master franchisee>franchisees system. Yet even in this final configuration, it was not entirely clear who the “owner-manager” was and who belonged to the “start-up assistance network”. Most of the central actors were in some way entrepreneurs: the SCJ manager was in charge of nurturing a whole new business for SCJ, the master franchisee now formally owned the CCS brand, and the franchisees owned their own individual yet affiliated businesses.

To conclude, in these conditions – when firms attempt to build new-to-the-world businesses – it is not clear who the “entrepreneur” is and who belongs to the start-up assistance network. The entrepreneurial function – to construct or to discover and exploit opportunities – is distributed across a diverse array of individuals and organizations. If there is a “master entrepreneur” it may not be the individual or individuals with residual ownership rights, or even the people contributing the most time to organizational activities, but the person or persons who ensure that the emergent collection of disparate entrepreneurs does not disband; the gardener who tends this entrepreneurial garden; the actor who nurtures and guides the evolution of the entire ecosystem. Yet even this “master” or “facilitating” entrepreneurial function can be distributed across people. In the SCJ case, at least the following actors played this role to some degree: Erik, Duncan, Justin, Joseph.

Framework for examining opportunity construction

The synthetic framework for opportunity construction processes is a substantive contribution to the entrepreneurship literature in its own right, as Alvarez and Barney (2007) state: “(opportunity) creation theory has yet to be articulated as a single coherent theory in the literature”.

By bringing together elements from improvisation, bricolage, effectuation, reflective practice, interpretive processes, and organizational knowledge creation, the synthetic framework provides a single composite tool for examining any opportunity construction process. As discussed previously, each of the parent theories has been developed to explain a particular phenomenon – for example improvisation looks at instances in which planning and execution converge in time. The synthetic framework can be used to examine the unique structure and sequence of any opportunity construction process; it is not constrained to the particular kinds of phenomena for which each of its ancestral theories was formulated.

Furthermore, the synthetic framework goes beyond simply integrating the elements that the underlying theories have in common, it expands on them in order to become applicable to a broader universe of processes while still capturing the essentials that distinguish opportunity creation from discovery. Two features of the framework stand out. Firstly, it allows for the examination of processes in which agency is distributed across actors. Theories such as bricolage, effectuation and reflective practice imply or require a focal opportunity constructor to drive the process. On the other hand, the theories on interpretive process and organization knowledge creation presuppose and necessitate the existence of collectives. The synthetic framework can be applied to a single driver of the process or to multiple drivers; it can even be

applied to multiple drivers of the same process as if each were its single motivator.

Secondly, the framework is agnostic regarding the open-endedness of the process and does not place upper bounds on its potential for creating novelty. Some of the precursor theories, such as disjointed incrementalism severely curtail the novelty of the outcome while others such as bricolage imply upper limits on the novelty and value of the effects.

Conditions that promote opportunity construction

As mentioned in the previous section, there doesn't exist a coherent theory of opportunity construction in the management literature, it is dispersed across different sub-streams. Thus, it is not well understood when entrepreneurial action is likely to adopt this outlook and when it is prone to rely on an opportunity discovery one. Most of the theories I draw upon implicitly assume that the capacity to construct opportunities belongs to the entrepreneur; Sarasvathy's "seasoned entrepreneurs" (Sarasvathy, Simon, & Lave, 1998; Sarasvathy, 2005) have developed a rationality for "effectual reasoning"; Baker and Nelson's (2005) bricoleur accumulates "odds and ends" on the principle that "they may always come in handy". These theories implicitly assume that opportunity construction occurs because the focal actor consciously decides to engage in it or is habituated to do so because she has already done it before and developed the requisite skills (Alvarez & Barney, 2007). The bricoleur cannot help being a pack rat, and the expert entrepreneur cannot easily disencumber himself of his experience.

This study shows that environmental and situational factors can and do drive opportunity construction behavior, even if the focal actor or entrepreneurial

team has not previously developed the talent or outlook for doing so. The main factors introduced in the Discussion Chapter that induce this mindset are: unclear organizational boundaries, multiple goals, and shared decision making. Deploying a field team to immerse itself in a community to develop a novel business engenders all three factors, and consequently activates the enactment of an opportunity construction mentality.

These conclusions can be readily tested and refined by surveying other entrepreneurial efforts where these conditions hold. Lester and Piore's (2004) examples of the interpretive process flourishing when different firms or organizational units work together to mesh technologies clearly demonstrates instances in which organizational boundaries dissolve and decision making becomes a shared activity. Such joint ventures are prime settings to confirm to what degree these factors engender opportunity construction behaviors.

Strategy process

In the Discussion Chapter I touch upon the distinction between intended and realized strategies (Mintzberg & Waters, 1985). The tension between these closely mirrors that between strategy *formulation* and *implementation*, and the debate about whether *structure follows strategy* or *strategy follows structure* (Chandler, 1962; Bower, 1974; Galbraith & Nathanson, 1978).

The more conventional strategy-implementation conceptual division in strategic management scholarship steers most attention towards a top-down approach to strategy formation. In Hart's (1992) strategy making typology presented in the Discussion Chapter, this approach fits the command or rational style of strategy making. Hambrick and Mason's (1984) "upper echelons" or top management teams are the "inner circle of executives who

collectively formulate, articulate, and execute the strategic and tactical moves of the organization” (Raes et al., 2011). Consequently, if middle managers’ role is to sell issues to top managers (Dutton & Ashford, 1993), serve as “linking pins” (Raes et al., 2011), and generally ensure that top managements’ wishes get executed, then lowly field teams are usually thought of as simple instruments with little effect on the strategy making process – at best, they play a role in the organization’s environmental scanning (Hambrick, 1982).

The “strategy process” stream of scholarship that emerged from the seminal field research conducted by Mintzberg, Bower, and others calls into question the assertion that strategy formulation comes first, followed by implementation or structure. This stream of research tends to emphasize the chaotic, bottom-up emergence of strategy, more a result of insights gained at the operational level (Campbell & Alexander, 1997) and autonomous strategic activities carried out by front-line managers and subordinates (Burgelman, 1983b) that subsequently get baked in to the realized strategy. This view of strategy making often leads to attempts to resolve the distinction between the strategy itself (where to go) and the process of developing it (how to get there) and is captured by aphorisms such as “strategy is the organization” (Eisenhardt, 2003) and “strategy is destiny” (Burgelman, 2001).

There are different models of bottom-up strategy formation; two of the most notable ones were developed by Bower (1970) and Burgelman (1983c). In these models, it is primarily the sponsoring activities of divisional level managers that determine which strategic projects proposed by their subordinates are pursued. The success or failure of these projects then determines the firms’ resulting strategies. Corporate or top level managers can affect the general direction and nature of the emerging strategies by

establishing the culture and constraints under which the divisional level managers make choices about which projects to endorse (Burgelman, 1983c; Burgelman, 2001).

These models emerge from field studies of internal corporate ventures of “diversified major firms”, agglomerations of widely diversified but partially related businesses grouped into major divisions. In these firms, most corporate ventures are spawned from within, relying on the firm’s existing capabilities and resources; the subordinates propose strategic projects based on available physical plant capacity, opportunities or discontinuities they perceive in their immediate markets, or new technologies they are developing (Burgelman, 1983a; Burgelman & Sayles, 1986).

Nonaka (1988) provides an alternate model of strategy development he calls compressive or middle-up-down management. In this model, abstracted from Japanese corporations, it is middle managers who take the lead in strategy development. They are tasked with creating and implementing concrete concepts to solve or transcend the contradictions that arise from the gap between top management’s context-free vision and what firm members on the “shop floor” experience, which is context-specific. In Nonaka’s Honda example, this management style is deliberately chosen by senior management to create ambiguity and foster innovation. Top managers are intentionally vague, couch visions in equivocal terms, and provide virtually no task direction. Middle managers then have to transform top management’s general vision into directions for the team’s activities and manage the ensuing chaos – or at least keep it within tolerable limits. Ultimately, in compressive management it is middle managers who are in charge of unifying individual visions into a single larger vision; strategy does not bubble up from the bottom,

it emanates from the middle.

Entrepreneurial sensemaking extends theorizing on the strategy process by presenting a fourth model of strategy process which is not top-down, bottom-up, or middle-up-down, but is instead *bottom-up meets top-down*. In Hart's (1992) framework of strategy-making processes, this would equate to a command or rational mode of strategy making encountering an emergent mode. In entrepreneurial sensemaking we have a deliberate top-down effort by senior managers to set objectives, a plan, and a set of constraints around which a new venture is to be launched. At the same time, senior managers empower a hierarchically low-level field team to ideate a new business in a far-off location that is difficult to monitor, thus deliberately or inadvertently seeding a bottom-up strategy development process. The crux of entrepreneurial sensemaking is the creative clash that then results between the opportunity construction mindset developed by the field team and the opportunity discovery approach enacted by top managers. Strategy emerges from the intense negotiation that ensues.

As in compressive management, strategy in entrepreneurial sensemaking could be said to come from the middle. But contrary to Nonaka's model, strategy is not generated by middle managers who are simply provided a context-free vision, no task direction, and a multidisciplinary team. In entrepreneurial sensemaking, strategy emerges from the dialectic interaction between top and bottom; from the efforts to make two worldviews and logics of action compatible. Middle managers do play a crucial role in entrepreneurial sensemaking, but rather than being the torch-bearers, they become the fulcrum that determines whether the process can emerge despite the natural pressures to revert to a top-down strategy development process.

As the entrepreneurial sensemaking process evolved in SCJ and ACB, it became apparent that the “middle managers” – or actors who had one foot in the field team and another in upper management (e.g. Erik, Justin, and Daniel) – played a crucial role in facilitating, driving, or obstructing the process. When they acted as mere conduits for top managements’ decisions, or on the contrary, just focused on selling field team issues to their superiors, the overall sensemaking and learning process faltered. When top managers bypassed them and dealt directly with the field team members, the field teams inevitably devolved to an order-following mode and abdicated ownership of the process; they did as they were instructed. When the middle managers managed to balance the pressures or resolve the differences emerging from the opportunity construction logic prevalent in the field and the opportunity discovery logic in the upper echelons, they hastened the development of the synthetic logic.

The dynamics of entrepreneurial sensemaking are not necessarily the result of a choice of managerial philosophy – as in compressive management, where top managers consciously decide to let middle managers take the lead – but can emerge due to the conditions of the situation. When teams are sequestered in the field and tasked with developing a novel business while top management remains at home, in a “developed” environment, the two distinct logics of action are likely to arise and set up the bottom-up meets top-down encounter – entrepreneurial sensemaking’s engine. When entrepreneurial sensemaking does occur, it is not painless or perforce lead to a successful outcome. As Campbell and Alexander (1997) remind us, strategy development is hard; it is a “puzzle that frequently doesn’t get solved”.

Innovation

The academic field of innovation is enormous and multivariate, this dissertation sheds light on a small but important corner of it. To start, a critical distinction to make is between invention – the creation of something new with potential for generating significant benefits – and innovation, defined here as the widespread adoption of an invention. In Hargadon's (2003) words, "Successful innovations are just those deviations that survived adolescence." To use an example, Apple's development and marketing of its first iPod – revolutionary as it was with its fresh design and novel Click Wheel interface – would be considered an invention. The iPod became a major innovation a few years later, once it was a top-selling MP3 player.

Under this definition, innovations cannot really be determined *ex ante*, only *ex post*; and significant ones usually take several years, if not decades, to reach fruition. It took decades for foundational technologies such as the light bulb, the electric motor, the gas-powered car, and the steam engine to move from invention to widespread adoption (Mokyr, 1992). The same goes for social or organizational innovations such as microfinance, micro brewing, and specialty coffee (Yunus, 1999; Carroll & Swaminathan, 2000; Rindova & Fombrun, 2001).

This distinction between invention and innovation serves to highlight the different elements that underlie the innovation process. Firstly, most invention and innovation is usually centered on technology. And technology, even though it is sometimes assumed to be a practice, is often centered on an object or a method that harnesses a natural phenomenon for some purpose (see Arthur, 2009 for a detailed discussion of the nature of technology). Thus, most innovation literature revolves around the evolutionary discontinuities (or

disruptions) of distinct product lines, such as minicomputers and airplanes (Tushman & Anderson, 1986). Gort and Klepper (1982), for example, document innovations in 46 different product categories in a single study.

As Hargadon (2003) and many others points out, a focus on the objects of a technology – the hardware and software, or the nuts and bolts – can draw attention away from the broader system that enables an invention to diffuse and be adopted, and instead tends to exalt the “lone genius” or promote the “cult of the great inventor”. This perspective on innovation is captured by the misquotation attributed to Ralph Waldo Emerson, “build a better mousetrap, and the world will beat a path to your door.” In this view, Thomas Edison singlehandedly invented the light bulb and Henry Ford was solely responsible for creating and implementing the assembly line.

A broader perspective on technology – such as Hargadon’s (2003) networked one in which technology is defined as the relationship between people, ideas, and objects –allows us to better examine the processes that underlie innovation rather than only invention. In the iPod example, key elements of the innovation process occurred years after the original device had been designed and put on the market; its success as an innovation was in no small measure due to the subsequent development of the iTunes store and the porting over of the iPod/iTunes software to the PC environment.

Again, Hargadon’s (2003) network-centric perspective on innovation helps us better understand the pre and post-invention processes that help drive adoption. In his view, it is the networks and communities that crystallize around an invention, and change the way people think about what they are doing, that over time lead to a major innovation. Hargadon argues that successful innovators are those that are able to form bridges to the old

networks of distant worlds and gain access to their established resources for use in a new arena; he calls this “technology brokering” (Hargadon & Sutton, 1997).

In technology brokering, invention takes a backseat to effective networking. It is not simply about designing a better mousetrap; it is about convincing others to join in the new venture – as investors, suppliers, employees, retailers, customers, and even competitors – especially those whose mature knowledge from a totally different industry may prove useful and quickly applicable in the new setting.

Technology brokering is very sympathetic to entrepreneurial sensemaking, but is at odds with another major perspective on innovation – Christensen’s (2000) theory of disruptive innovation, popularized in the book “The Innovator’s Dilemma”. According to Christensen, established networks – mainly one’s current set of customers – are actually an impediment to disruptive innovation because they trap firms in their current “technology trajectories”. Established networks penalize firms for exploring options outside these trajectories because the alternatives’ initially offer dismal price-performance ratios for the currently prized attributes.

The main point here is that in Christensen’s view, old networks hinder innovation, while in Hargadon’s view, bridging to old networks is necessary in order to incorporate ready-made technologies into the invention and thus facilitate adoption.

Entrepreneurial sensemaking bridges these two perspectives on innovation. First of all, innovation in sensemaking is even more agnostic towards objects than it is in disruptive innovation or technology brokering. Since the focus is on creating a new-to-the-world business, there may or may not be a need to

invent a new product. Many innovative businesses are simply the recombination of already existing elements; the emergence of microfinance as an institution did not require the design of any physical object.

In entrepreneurial sensemaking, as discussed in the Theory Development Chapter's section on opportunity construction, we do see the creation of new networks densely populated with strong ties, especially at the sites where the field teams operate. These new networks serve Hargadon's conditions for innovation, namely: "a small group of individuals committed to a common goal" that provides "the collective support necessary to risk going against the established ways of doing things" (Hargadon, 2003). These new networks also serve to broker technology on a local scale. But in contrast to Hargadon's view, where the technological elements these networks provide are mostly around objects and knowhow, in entrepreneurial sensemaking they can be about business model components or market-related behaviors.

To illustrate, Hargadon (2003) uses the example of how the firm Design Continuum created the Reebok Pump sneaker by importing concepts and expertise it had developed while working for hospital and diagnostic equipment manufacturers. Not only did the ideas for using little pumps, tubing, and valves emerge from this previous experience, Design Continuum was able to convince an IV bag manufacturer to become Reebok's supplier of air bladders for the new shoe. In the ACB case, the field team was able to borrow and adapt elements from a wide range of businesses that already operated successfully in the Madeiran BOP. ACB's proprietary peer-based distribution channel drew inspiration from localized direct sales businesses; its payment system piggybacked on the network of existing corner stores.

The new networks formed at the BOP by ACB and SCJ also served as

Christensen's (2000) "small markets" and "fringe clients" – those that find value in attributes that mainstream clients do not currently care about. Thus, SCJ found that its general purpose cleaner and other products could be sold in bulk format – without their container-integrated specialized dispensation mechanisms.

But in entrepreneurial sensemaking, the firms weren't tied to only using Christensen's small and isolated networks for innovating or to only bridging Hargadon's distant worlds, the process allowed them to engage in both processes simultaneously. The upper echelons of ACB and SCJ did not abandon their existing networks in order to innovate only with the "BOP fringe clients"; they continued their normal activities and maintained their "old" relationships. They brokered technologies from their existing networks to the nascent communities of practice their field teams were cultivating at the BOP. In ACB's case, for example, core technology development was initiated in Chicago and Boston in conjunction with "old network" partners and later shifted for refinement and localization to the Madeira site; ready-set Chinese suppliers were used initially for ACB's technology platform, but production slowly shifted to Tierra Santa as the local network there grew and adapted to ACB's requirements.

In conclusion, entrepreneurial sensemaking serves as a bridge between two apparently contradictory perspectives on innovation – that new worlds are built from the pieces of old ones; and that innovators have to start fresh in order to free themselves from the constraints of established ways of doing things. Opportunity construction and opportunity discovery – the mindsets that entrepreneurial sensemaking transforms into a single synthetic logic – are each naturally inclined towards one of the aforementioned perspectives on

innovation. Field teams naturally create networks centered on the new performance attributes of the emergent venture, Christensen's "small markets"; senior management relies on its existing "old" networks to bring relevant resources and knowhow to bear on the issue, Hargadon's "technology brokering". As the field teams and senior managers jointly make entrepreneurial sense of their effort, they also merge these two innovation processes.

Implications for research

This dissertation shines a light on promising areas for future research, as well as some gaps in the management literature. I discuss some of these avenues and literature gaps below.

Ethnographical research of the entrepreneurial process

As others have noted (Gartner, 1989), ethnographical studies based on direct observation of the entrepreneurial process are scarce. The reasons for this scarcity include: (1) ethnographical research is a high-risk proposition for management scholars; (2) first-hand observation and participation requires an outsize commitment on the part of the researcher, as well as a supple support system; (3) opportunities for observing and participating at the right moment are difficult to discern beforehand – once a researcher identifies an entrepreneur or organization to work with, many of the entrepreneurial processes of interest have already occurred; and (4) it's hard to gain intimate access to these processes, entrepreneurs in action don't usually have the time, energy, and willingness to drag an observer around for months on end and provide access to every meeting, e-mail, phone call, and conversation.

Furthermore, most organizational ethnographers study stable organizational environments – their search for patterns and deep structure draws them to these kinds of settings. But observing open-ended processes requires an even greater level of immersion and appreciation of the emic perspective. This dissertation is one attempt in this vein, but it clearly shows that there is room for many more similar studies.

Research on field teams

Despite the huge literature on multidisciplinary and product development teams, a review of the management literature shows surprisingly little of research on field teams; and almost nothing on field teams specifically tasked with creating new businesses. This is not about a “much-needed gap in the literature.” As this study demonstrates, the processes that business-creating field teams and their managers undergo are of theoretical and practical interest.

One of the reasons that field teams have not received much attention from management scholars is because of how we think of them and what purposes they usually serve. What literature there is on field teams generally treats them as organizational tools used to carry out very specific and delimited tasks. Thus, multilateral institutions deploy field teams to developing countries to apply pre-designed surveys and collect baseline economic data, medical organizations send field teams to treat patients at their homes or villages, and firms send field teams out to deal with specific technical issues their customers have which need to be dealt with onsite. The mental image many of us have of a field team member is the technician sent to fix our cable or internet connection. We often view field team members as people of low organizational

rank, provided with specific instructions, clear targets, and severely limited in their scope of activity.

This dissertation shows that – in the case of field teams deployed to create new businesses – this conceptualization may be faulty, and at times has led us to overlook significant processes that influence strategy formation.

There are many unanswered questions around field teams, especially those tasked with activities that can have strategic impact. How common are these teams? How often do firms deploy field teams to develop new businesses in far off locations? The Cemex and Honda examples presented in the introduction suggest that the phenomenon is not too rare, nor necessarily constrained to firms who are looking to “do well and do good”. Immelt et al. (2009) describe how GE evolved its “local growth team” (LGT) model. LGTs mirror the kind of field teams described in this study in important ways, not least because they develop new offerings for local markets and directly affect GE’s strategic scope. LGTs are based on the following principles:

- Shift power to where the growth is.
- Build new offerings from the ground up.
- Build LGTs from the ground up, like new companies.
- Customize objectives, targets, and metrics.
- Have the LGT report to someone high in the organization.

Despite these examples, we do not know how widespread these kinds of teams are; how they vary among firms, industries, and contexts; nor how they are usually put together, trained, or managed.

Boundary conditions for the opportunity construction framework

The main deficiency of the theories I used to build the opportunity construction framework (e.g. improvisation, bricolage, etc.) is that most of them cannot be used on their own as a lens for examining opportunity construction; they do not provide a wide enough view of the process of business creation. For example, examining to what extent planning and execution converge in time – improvisation – is not sufficient for convincingly explaining how an entrepreneurial process unfolded or why it did so in a particular manner.

The synthetic framework does prove sufficient for examining the SCJ and ACB cases, but it could still use more development to better determine when it is applicable and when it is not. Does it help to explain and understand other open-ended processes? Would the addition of another element greatly improve its explanatory and sensemaking powers? Under what conditions does it not provide any value?

Entrepreneurial sensemaking

The main contribution of this dissertation – entrepreneurial sensemaking – is a new theory, one that emerged from grounded theory building and a particular set of circumstances. As such, it begs to be tested, refined, and expanded. For example, how important was each of the factors that were seen to promote opportunity construction (unclear organizational boundaries, shared decision making, and conflicting goals)? Is one factor more important than the others? Are they fungible? Do all have to obtain in order to promote opportunity construction? May there be other factors, in different contexts, that also promote opportunity construction?

Entrepreneurial sensemaking emerged from a pretty extreme context. Teams

living at the BOP are about as far away culturally, psychologically, and emotionally as it is possible to get from the executive suite. To what extent does the process occur when there isn't such a drastic difference between the contexts of senior management and the field teams? In other words, how distinct to the top and bottom environments have to be in order to drive each of the logics?

Other key issues that could affect the process include the nature of the field team's task – in this case to create a novel business that also provides social or environmental benefits – and the team's level of autonomy or isolation. How ambiguous and difficult must the field team's task be? How much leeway and decision-making responsibility has to reside in the field team in order for it to not simply fall back on simply following orders and abdicating its own initiative?

IMPLICATIONS FOR PRACTICE

A substantial body of evidence suggests that managers and executives do not use academic research as a basis for their strategy making (Abrahamson, 1996) and that there is a wide gap between organizational research and managerial practice (Rynes, Bartunek, & Daft, 2001). Academics blame this research-practice gap on profound differences between academics' and practitioners' basic assumptions, beliefs, frames of reference, and ways of understanding what is "true" (Shrivastava & Mitroff, 1984). The gap is also blamed on a knowledge transfer problem – the inability to translate research findings into ideas and practices that are meaningful to managers (Van de Ven & Johnson, 2006b) and that are also sufficiently timely and specific. Some academics even argue that academic research findings should not be

“dumbed down” for managers (McKelvey, 2006).

Contrary to this feeling and to the much discussed research-practice gap – due to the combination of its driving research question, research methods, and sample – this dissertation does provide actionable insights for managers. While the study generates learnings for general entrepreneurship, innovation, and strategy-making processes, I will focus on the takeaways related to BOP-focused ventures. These fall into two main buckets: (1) implications and suggestions for corporate actors who are interested in the BOP or using “business thinking to solve the world’s problems” and wanting to learn more about the field before making a decision whether to pursue a BOP strategy, and (2) learnings and advice for professionals already committed to building businesses with the BOP or perhaps already engaged in such ventures.

Should we innovate with the BOP?

For the reader that is learning about the BOP movement and evaluating it as an option for action, the first takeaway from this study is that one should carefully consider what kind of approach to the BOP – business *for*, *by* or *with* – best fits the firm’s intent, capabilities, resource base, and most importantly, it’s outlook and philosophy. This section charts some of the main considerations, challenges, and pitfalls to consider when pondering a “business *with* the BOP” course of action.

The first conclusion of this dissertation in this regard is that in order to effectively work *with* the BOP, a firm or an entrepreneurial team has to undergo a period of immersion and relationship-building in the target community. In most cases, this involves deploying a field team, or possibly creating a local subsidiary. A series of trips to recruit already established

businesses or NGOs to serve as local partners does not really fall into the “business *with* the BOP” category. The deployment of a field team with the express goal of creating a business with the BOP sets up the conditions for an entrepreneurial sensemaking process.

The main question for the would-be corporate innovator is whether the firm is sufficiently prepared to house and nurture this kind of open-ended process. Entrepreneurial sensemaking will lead to the questioning of the firm’s strategic nature and sense of “who we are” and “what we do” (Navis & Glynn, 2011) and attempts to modify, amplify and expand it. In ACB’s case, the entrepreneurial sensemaking process encouraged firm members to change their view of the company as a designer and provider of point-of-use technological solutions to the Vitamin/Virus/Parasite problems at the BOP to one of being an “enabler of healthy living habits”. In SCJ’s case, the process challenged participants’ perception of the firm as a producer and marketer of fast-moving packaged consumer goods driven by the strength of its individual brands. To succeed at the BOP, SCJ switched to offering bundled services, developed an entirely separate value chain, and reached out to customers in different, much more direct ways – SCJ became a franchiser of service providers.

These experiments in rethinking a firm’s purpose and strategic nature may not necessarily lead to a successful synthetic logic or a strategic renewal. In Cemex’s case, Patrimonio Hoy was eventually disbanded – despite the fact that it was profitable and growing – because Cemex’s senior managers were ultimately unable to expand the firm’s strategic scope to include a business that was so different (Segel, Chu & Herrero, 2006). The same ultimate conundrum still holds for ACB and SCJ; as of the writing of this, neither firm

has concluded the entrepreneurial sensemaking process or reached a stable, new strategic direction in their BOP efforts.

So, to reiterate, the main question for would-be entrepreneurial sensemakers is whether they and their firms have the sufficient initial flexibility, patience, resources, and maturity to manage such a process. To achieve a new and stable synthetic logic, there *will* have to be organizational and personal transformation.

Time frame

Field team immersions that have a reasonable chance of spawning a successful business – such as CEMEX’s, Honda’s, ACB’s, and SCJ’s – rarely take less than eighteen months to generate a business concept, initial market demand, and some compelling proof of viability . As I described in the Introduction, it took Yunus several years to arrive at the general idea of providing credit to the poor, and then many more to develop and refine the business that would come to be known as peer-based lending or microfinance. In a more contemporary case, it took Dr. Tralance Addy, the founder of WaterHealth more than six years of experimentation, six million dollars in investment, and a bankruptcy to generate a convincing BOP business model centered on the village-scale, UV-based water purification technology he had licensed. The revamped business model enabled WaterHealth to raise additional capital. It then took the firm seven more years to reach an installed base of six hundred WaterHealthCenters (Faheem & Purkayastha, 2010).

Overall, examples of innovative BOP business models that take years or decades to gestate vastly outnumber the cases of quick success – and the number of failures exceeds the number of successes by orders of magnitude.

But despite the knowledge that in real life businesses usually take more than five years to develop, most firms cannot commit to five-year open-ended venture launch plans. Fortunately, an understanding of the entrepreneurial sensemaking process may enable firms to reasonably expect to develop the core of a viable BOP business with proof of demand in eighteen to twenty-four months. The main reason this period cannot be shortened is the rate at which trust-building and social legitimation occur, but a preparation for effective sensemaking can help reduce the amount of additional time misspent on experiments, tests, product development, and abortive business launches that will definitely not encounter demand. A well-managed sensemaking process can help avoid the blind stabs in the dark resulting from pure opportunity discovery and the aimless meandering that can result from unadulterated opportunity construction.

Resources

An immersive sensemaking process does not need to be hugely expensive. In fact, the direct costs of sustaining a 4-8 person field team for two years might be negligible in terms of a corporation's R&D budget, but for smaller firms, individuals, or mid-size corporate units with more modest budgets, committing to a two-year open-ended project with nebulously defined deliverables might be hard. It may also inadvertently lead to an oppressive, top-down approach that short-circuits the entrepreneurial process from the start. If a manager applies fifty percent of his discretionary R&D budget to a single project, he'll likely get evaluated on it and feel the need to show clear goals and consistent progress towards them. A very strong opportunity discovery mindset at the top right at the start of the effort may set the stage in a way that hinders the field

team from developing an opportunity construction logic of action; the project then becomes a simple top-down implementation exercise with a high likelihood of failing once the “product” is launched, sales fail to materialize, and it’s determined that there is “no demand there.”

Entrepreneurial sensemaking improves when the adequate physical, organizational, human capital, and political resources are set aside for the process from the start and are made available upon demonstrated progress along learning and development dimensions rather than traditional business evaluation metrics.

Pitfalls

It should be noted that most BOP-focused ventures are usually not provided the full suite of required support: patience, resources, and flexibility. As mentioned, even though we know that most start-up and corporate ventures fail, and that those corporate ventures that do succeed take on average eight to ten years to reach maturity, BOP-focused ventures – which arguably have even worse odds of survival given their additional constraints – are often expected to produce fundamental innovations that:

- Are perfectly compatible with the firm’s existing strategic stance and resource base
- Scale quickly and virally
- Quickly become self-sustaining
- Clearly and measurably address the social ill they were originally targeted at

These high expectations – rather than serve as stretch-goals – often help

derail incipient projects and provide ammunition for early critics to take pot shots and eventually shoot them down.

In addition to unreasonable expectations regarding the effort's outcome and duration, a common assumption is that these ventures should be "entrepreneurial" – meaning opportunities are to be pursued without regard to the resources currently controlled (Stevenson & Jarillo, 1990). Starting such an effort without the bare minimum of resources, and with the expectation that the necessary resources will be acquired effectually through the process itself – for example, by bringing other partners on board as needed – may have two important consequences: (1) loss of direction, and (2) overreliance on a single project "champion".

Procuring resources from others naturally injects their preferences and priorities into the entrepreneurial process. While fluidly integrating external parties into the process as needs arise is part and parcel of opportunity construction, it is antithetical to opportunity discovery. If the constant pressure for acquiring the venture's essential resources implants an opportunity construction mindset in senior management, half the ingredients necessary for entrepreneurial sensemaking are removed. In these cases, the venture may become prone to simply "following the money", and become the kind of entity its sponsors at the time would like to see. This can lead it astray from building opportunities that really create demand because future BOP customers are rarely the sponsors injecting the cash at the start. This is akin to the mission drift that occurs among many NGOs that "serve" the BOP but that really opportunistically hop between projects, catering to donors' wishes rather than to their BOP communities' expressed needs. Organizations tend to respond to the wishes of those who control the resources the organization needs (Pfeffer

& Salancik, 1978).

The second potential consequence of relying on a more “effectual” approach to resource acquisition is that the venture may come to rely primarily on the fund-raising abilities of a single actor – the project’s “champion”. This champion many times is able to attract investment and support not necessarily because of the ideas or process underlying the venture, but because of her perceived enthusiasm, charisma, tenacity, or drive. While this view of entrepreneurial action is valid, it is a different model and logic of business development – more akin to Ashoka’s version of social entrepreneurship (Drayton, 2000) – than it is about entrepreneurial sensemaking. If the process revolves around a single focal actor, then it is difficult to get a dialogue between opportunity construction and opportunity discovery logics.

Innovating *with* the BOP

For more experienced practitioners, or people already involved in a business with the BOP or fully committed to pursuing one, this study provides a multitude of insights and suggestions. I touch here briefly on only a few of them: field team composition, field team development, and senior management preparedness.

Field team formation

As much as we all like to think we are good judges of character, it is really very difficult to predict how a particular person will behave or perform under circumstances she has never been under before, nor how she will function in a brand new team. In other words, it’s very difficult to form an effective and well-functioning field team before the actual immersion. Most of us are trained and

live in a predominantly opportunity-discovery world that prizes rationality, logic, planning, goals, foresight and clear-headedness, yet the conditions a field team will live and work in push towards an opportunity construction logic – or to a failed immersion. The ideal field team will enact an opportunity construction logic but will also be able to maintain meaningful interaction with an opportunity-discovery-enacting senior management team.

When things seem to be stuck and no progress is being made, there may be the temptation to give the team leadership position to a “natural” entrepreneur. The danger with this is the possibility of a breakdown of communications between the two logics. On the other hand, keeping a “trusted lieutenant” as team leader – someone known as a can-do person, who does what needs to be done – may simply transfer the opportunity discovery logic to the field team and thwart the development of an appreciation for opportunity construction.

Finding the right team leader or combination of team members that can enact an opportunity construction logic while retaining the ability to meaningfully interact with their superiors will likely require some trial and error. It is almost axiomatic that not all the initial selections for team members will work out, one must be willing to quickly change members and roles as needed. Retaining members for too long who can't effectively manage the process has been one of the main mistakes documented in the studied cases.

Also, as mentioned in the Theory Development and Discussion Chapters, the entrepreneurial function tends to be distributed in these processes. So the team needs to be formed with the best possible candidates, not solely focusing on the team leader. Team members should be selected primarily for their tolerance of ambiguity, their ability to motivate others to engage in an open-ended process, their capacity for practicing humility and developing

genuine relationships, and most importantly, their deep and true desire to live at the BOP and serve it. Other skills traditionally held in high regard for project managers or team leaders – such as technical knowledge, leadership skills, decisiveness, political power, etc. – may not be the best indicators of the ability to manage and participate in an entrepreneurial sensemaking process.

Another issue to consider when forming an immersion team is the length of the process. Ideally, members should be selected for the long haul, at least a two-year commitment – with the possibility of early departure if they prove unsatisfactory, as per the earlier point. In order to minimize long term commitments, many corporate immersion efforts are launched relying heavily on external consultants, student interns, independent contractors, or outsourced part-time employees. While this model is adequate for exploratory and information gathering activities, it does not support an entrepreneurial sensemaking process. These kinds of actors will simply not have the time to build the necessary relationships on the ground to effectively construct opportunities, nor will their organizational identity be strong enough to maintain intense negotiation with senior management and constructively manage the attendant conflict.

Other important issues to consider when forming an immersion team for entrepreneurial sensemaking include: language capabilities, cultural adaptivity, and organizational familiarity. It is important that team members speak the local language fluently; an inability to do so does not kill the process – interpreters can be used – but it does slow it down considerably and embeds additional sources of misunderstanding and conflict. In relation to this, it is very convenient if most of the team members are to some extent local or native. Deploying foreigners to far-off countries for extended periods of time is very

stressful to them, more so when they are asked to live and work in BOP conditions and sacrifice almost all the “comforts of home”. In the studied cases, there were numerous examples of burnout resulting from cultural shock coupled to the intensity of the process. On the other hand, the field team does require members who are familiar with the parent organization, understand how it works, and can communicate effectively with their superiors.

Field team development

When asked to develop a novel business in close partnership with potential BOP stakeholders, few people really know what to do. At best, some team members may have experience in western style business startups (i.e. opportunity discovery based approaches based on market research, pitching business plans, etc.) or some industrial product design experience. Very rarely is someone on a field team formally trained in co-creation, co-invention, co-venturing, collaborative business development, or community immersion. Sometimes an anthropologist, social worker, or participatory development practitioner is added to the team to plug this skills gap, but this rarely works in terms of business development. These disciplines are usually focused on understanding, helping, or empowering communities, but they do not integrate their community mobilization skills with the demands of constructing a commercial opportunity for a firm.

Firms are exhorted to practice embedded innovation, and to develop the capabilities for innovating *with* the BOP, but there is no manual for this. This dissertation suggests that, given the open-ended nature of the process, there cannot be a detailed manual. It would be akin to a manual for entrepreneurs, something which has been tried countless times, yet not consensus has been

achieved on what its essentials are. Entrepreneurship is still considered more “art than science”.

Since it is difficult, if not impossible, to adequately train a field team for opportunity construction in a classroom or off-site, the immersion itself can be used as a process for testing and training the team. Learning by doing, and experience living the process are what breed expertise in opportunity construction, tolerance for ambiguity, and the ability to negotiate the logic-dichotomous command structure.

In light of this, firms trying to innovate *with* the BOP would be wise to structure the immersion process in a way that enables the team members to develop the requisite skills and outlooks as they participate in it. This means starting slow, focusing initially on relationship building with the community and potential local partners, and supporting the team in its efforts to “become native”, rather than pressing for the immediate start of information gathering or outright ideation and product development activities.

Team members should be initially evaluated on their ability to set the stage for opportunity construction:

- How well can they establish relationships of trust within the community? (Not only with its purported leaders or most westernized and educated members).
- How good are they at generating enthusiasm and commitment in the community?
- How good are they at maintaining open-endedness? At dealing with ambiguity and uncertainty on a sustained basis, without trying to prematurely reach closure?
- How good are they at keeping the growing network of potential

stakeholders committed to the venture while managing an action-learning process that doesn't foreclose options?

After a few months of relationship building and the creation of a core business concept, the emphasis of the effort on the ground shifts from the courting of ambiguity to more concrete business activities such as developing prototypes, generating sales leads, creating organizational identities, evolving governance systems, and fostering customer relationships. The main challenge at this point is moving towards these more commercial and operational activities without sacrificing the social embeddedness that has been achieved. The field team should not be replaced – at least in its entirety – at this point in order to inject these more operational skills; maintaining and evolving the incipient relationships with stakeholders still is the most delicate and crucial activity.

As needed functions crystallize – and senior management develops a clearer understanding of current team members' capabilities – the field team can be gradually morphed and strengthened by adding or substituting one member at a time. An effective way of ensuring this process goes smoothly is to let the field team itself take the lead in searching for, vetting, selecting and inducting new members.

To conclude, the main challenge in field team development is managing the tension between the stability required for local stakeholder relationship-building and the changes that result from bringing new skillsets to bear in response to evolving business demands.

Senior management preparedness

Senior managers need to understand the stresses and requirements that the deployment of an immersion field team may have on a firm and prepare accordingly. The field team members themselves cannot really foresee what it is they are getting into, and it's unreasonable to expect the team to singlehandedly develop a new business and a new market. Senior managers have to be involved from the outset and highly committed to the process in order to not only provide the needed space and support – such as protection from traditional operational performance metrics – but most importantly, to serve as an anchor for the field team. In other words, senior managers need to understand how to enact an opportunity discovery logic that ensures that the field team's opportunity construction activities remain broadly aligned with what the firm can ultimately commit to. At the same time, they need to provide the field team enough autonomy so that it is able to develop its opportunity discovery mode of action and not revert to simply following orders. Most firms that deploy field teams to interactively construct a business with a community end up with businesses that are much more complex, broad in scope, and multi-layered than what was initially envisioned; senior management has to consider this from the outset to provide effective guidance and feedback to the team.

In both cases analyzed, senior managers were as unprepared and inexperienced in entrepreneurial sensemaking as the field team members. This ensured that the process in each case was more conflictive, drawn-out, resource-intensive, time-consuming, and energy draining than it needed to be. If conflict becomes pervasive, it can easily shift from beneficial task conflict to destructive personal conflict. It is senior management's responsibility to help

avoid or manage conflict; senior managers are the “older brothers” in this relationship, responsible regardless.

An important issue that senior managers should realize is that the firm’s ability to engage in entrepreneurial sensemaking is akin to a dynamic capability – it is dissipative, unstable, and produces unpredictable outcomes (Eisenhardt & Martin, 2000). Dynamic capabilities are semi-structured and based more on individuals’ or inter-group skills than on organizational routines or systems. The implication is that this capability – which has to be “learnt by doing” – is tacitly held by the participants in the process and is also embedded in the pattern and nature of relationships held within the group (including senior managers). It takes time, perseverance, and patience to develop the capability, so senior managers must be careful not to lose or degrade it through deficient human resource practices. A corollary to this is that some initial ventures may be economic failures but may serve as great opportunities for developing an entrepreneurial sensemaking capability. The challenge for firms is to take the long view and persevere after the first, second, or third apparent failure, and not fire or exhaust the crucial employees before they have fully matured. Creating a market is tough business, is senior management truly committed?

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