

Social Entrepreneurship: Societal Wealth Creation Under Conditions of Near-Knightian Uncertainty

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DEDICATION

For my mother, who has given more generously than a son could ask or expect; and without whom this would not be.

For my father, who believed it was a good idea.

For my sister, who is always there, no matter what.

For Greg and Calvin; may they grow to be good men.

And in memory of my brother who we still miss dearly.

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ABSTRACT

In this dissertation I examine the emergent phenomenon of social entrepreneurship through the lens of the structure of entrepreneurial payoffs under conditions of near-Knightian uncertainty. Current theory assumes entrepreneurs will respond to a new form of incentive, beyond the pursuits of wealth, power, and prestige. It also assumes that productive entrepreneurship can result from a shift in the structure of payoffs. I examine four for-profit social entrepreneurial experiments executed in Southern Africa in order to enhance understanding of the question: “What recurring challenges do for-profit social entrepreneurs face in attempting to restructure payoffs under conditions of near-Knightian uncertainty?”

My data are drawn from field observations, company archival records, email communications, and unique targeted interventions designed to solve vexing challenges which arose in the course of the experiments. The dissertation makes several contributions. First, it uncovers several new insights from my findings which should inform future research in for-profit social enterprises. Second, it sheds light on enterprise creation under conditions of near-Knightian uncertainty. Third, it introduces a framework for understanding the challenges faced by nonsingular objective firms, and proposes that lack of success in the creation of such firms is not necessarily failure – there are multiple levels of success that are part of an Aspirations Cascade, the highest efficiency being delivered by the social impact enterprise and the lowest efficiency achieved from direct charity.

Keywords: entrepreneurship, social entrepreneurship, Knightian uncertainty, economic development, foreign aid, emergent strategy, social impact, lean resources

ZUSAMMENFASSUNG

Die vorliegende Dissertation untersucht das Phänomen des sozialen Unternehmertums (social entrepreneurship) im Hinblick auf das Anreizsystem unternehmerischen Schaffens unter Bedingungen, die Knight'scher Unsicherheit ähneln. Bisherige Theorien treffen die Annahme, dass Unternehmensgründer neuen Arten von Anreizen folgen, jenseits von Reichtum, Macht und Prestige. Weiter wird angenommen, dass produktive Unternehmensgründungsaktivitäten aus einer Veränderung des Anreizsystems resultieren können. Vier gewinnorientierte soziale Unternehmungsgründungsexperimente in Südafrika werden untersucht, um folgende Frage zu erforschen: "Mit welchen sich wiederholenden Herausforderungen sehen sich gewinnorientierte 'Social Entrepreneurs' konfrontiert, wenn sie versuchen, unter Bedingungen, die Knight'scher Unsicherheit ähneln, unternehmerische Anreizsysteme zu verändern?" Die Daten für diese Untersuchung stammen aus Feldbeobachtungen, Unternehmensarchiven, elektronischem Briefverkehr und gezielten Interventionen, die darauf ausgelegt waren, Herausforderungen zu meistern, die im Laufe der Experimente auftraten. Die Dissertation leistet folgende Beiträge: Es werden neue Einsichten gewonnen, die zukünftiger Forschung zum Thema gewinnorientierter sozialer Unternehmungen helfen wird. Unternehmensgründungen unter Bedingungen, die Knight'scher Unsicherheit ähneln, werden beleuchtet. Ein Rahmenmodell wird vorgestellt, das dabei hilft, die Herausforderungen von Unternehmen zu verstehen, die nichtsinguläre Zielvorstellungen haben. Die Forschungsergebnisse zeigen, dass das Ausbleiben von Erfolg beim Aufbau solcher Unternehmen nicht unbedingt als Fehlschlag gesehen werden sollte, da es verschiedene Ebenen von Erfolg gibt: am effizientesten ist die soziale Unternehmung, am wenigsten effizient direkte Hilfe von Wohltätigkeitsverbänden.

Schlagwörter: Entrepreneurship, Unternehmensgründung, Social Entrepreneurship, soziales Unternehmertum, Knight'sche Unsicherheit, Entwicklungshilfe, emergente Strategie

1. Research Question

Foreign aid to desperately poor countries has failed to generate the stated goals of economic development and societal upliftment. A growing roster of scholars studying the issue have found compelling evidence in support of this proposition, first articulated by Bauer 40 years ago (Bauer, 1972). Few studies have found positive outcomes of rich countries' investment in development; and many have instead found negative ones (Easterly, 2001, 2006).

Zambian economist Dambisa Moyo (2009), for example, revealed that over the past five decades the West has given more than half a trillion pounds to Africa, but over the past three decades the most aid-dependent recipients saw negative annual growth rates. The reason for this, say critics, is that foreign aid programs interfere with the robust factors associated with economic growth, such as private sector entrepreneurship, instead fostering long-term dependency.

Shleifer (2009) suggests that the core of the aid problem is the misallocation of social resources. Citing work by Easterly (2009), he observes that as a result of aid, "The limited institutional and human capabilities of a country are wasted on unproductive rather than productive activities" (p. 382-382). This observation is consistent with the work of Baumol, who suggests that entrepreneurial talent and entrepreneurial resources respond to incentives, what he terms the 'structure of payoffs' in an economy (Baumol, 1990; Baumol, 1993a). Entrepreneurial activity, he argues, is always present in an economy, but that the allocation of entrepreneurial talent and energy does not always go toward constructive and innovative ends. Indeed, entrepreneurial activity can be unproductive, and even destructive, depending on the incentive structures in place. In other words, Baumol suggests that we "follow the money." Who is getting paid and what they are getting paid for, therefore, are keys to

understanding where the creators of new wealth (Schumpeter, 1942) will expend their economic energy.

Productive' entrepreneurship, according to Baumol, is that which contributes "directly or indirectly to net output of the economy, or to the capacity to produce additional output" (2003, p. 30). 'Unproductive' entrepreneurship, in contrast, consists of consuming societal wealth without contributing to the creation of more wealth. A common form of unproductive entrepreneurship is simple rent-seeking, for instance, the regrettable but widespread practice by law firms of filing legal cases with the intention and expectation that these will be settled, irrespective of the merits of the case. More extreme forms of unproductive entrepreneurship may even devolve into 'destructive' entrepreneurship, illegal or immoral activities, such as engaging in drug-dealing or demanding bribes. Baumol has suggested that a society seeking to increase its wealth would do well to tilt the structure of payoffs in such a way that entrepreneurs' desires for wealth, prestige and power are consummated in productive, rather than unproductive or even destructive ways.

This idea of the structure of payoffs is found in the work of economist Peter Bauer who controversially defined aid programs as "a transfer of resources from the taxpayer of a donor country to the government of a recipient country" (Bauer, 1972 p. 396). This transfer, he said, "can be considered as a fundamental distortion of the allocation of entrepreneurial talent away from productive economic activity toward unproductive economic activity." Flows of foreign aid has created all kinds of adverse incentives, from creating political constituencies for aid organizations to persist in their current form, to discouraging self-sufficiency among aid recipients (because to become self-sufficient would reduce access to aid).

With this call for more market-based approaches to development, we see increased interest in 'social enterprise', organizations that have emerged in response to the

shortcomings of the traditional model of foreign aid. A social enterprise, unlike a strictly for-profit organization, attempts to solve a pressing social problem while also generating sufficient funds to be self-sustaining in full or in part, or in some cases offer returns to the social entrepreneurs involved. Grameen Bank, founded by Nobel Laureate Mohammad Yunus, is a noteworthy example. Grameen offers microloans to extremely poor people who use the money to invest in wealth-increasing assets (such as purchasing livestock). When their investments pay off, they repay the loans with interest, rewarding the investors in Grameen Bank. In effect, organizations like Grameen are attempting to realign the structure of payoffs, to use Baumol's words, both for the bank and for the people to whom the money is lent. By making it possible for even the very poor to engage in entrepreneurial activity, the bank creates payoffs where none existed in the traditional financial regime¹.

The social entrepreneurship (or social enterprise) phenomenon has been embraced with enthusiasm by advocates for the poor, by skeptics with regard to traditional forms of aid, and by entrepreneurship enthusiasts as a novel mechanism for creating additional forms of social wealth. The media are awash with stories and examples; organizations from the Bill and Melinda Gates Foundation to local universities have invested in so-called 'social enterprise' programs. There are now academic departments in universities offering courses in social enterprise and new academic journals² devoted to the topic. Indeed, the business media have reported that social enterprise—business models that pursue both profits and societal wealth simultaneously—could well grow into an entire new global economic sector.³

¹ While this has led to widespread media coverage there have been recent accusations particularly by politicians that this democratization of lending practices has negative outcomes in the form of harassment of debtors and increasing debtor defaults.

² Journal of Social Entrepreneurship, Routledge, ISSN: 1942-0676

³ I define societal wealth creation as the specified, measured, and monitored improvement of one or more social dimensions such as health, nutrition, or education. For such projects I do not consider employment creation alone as the societal goal - employment is a natural corollary of conventional business growth. I am concerned here with additional societal enrichment or benefit.

Interestingly, the clamor around this new phenomenon is attracting a very diverse mix of players. On one end, many nonprofits, under pressure to become more effective with limited resources (Letts, Ryan, & Grossman, 1997) or facing rivalry from for-profit firms entering the private sector (Dees, 1998), are considering how they too might become more “entrepreneurial” in thinking and behavior (Dees, 1998; Dees & Anderson, 2003; Weerawardena & Mort, 2006). On the other end are large for-profit firms, whose focus on corporate social responsibility and the Green movement is propelling them to embrace social entrepreneurship. Finally, the traditional aid and development world is also looking at social entrepreneurship as one way of becoming more attractive and accountable to donor agencies.

This confluence of participants operating under the wide umbrella of “social entrepreneurship” brings together a broad set of organizations with differing perspectives on how to attend to the plight of populations around the world suffering from poverty or other societal iniquity. As a result, we are entering a development world in which it is becoming extremely difficult to discern among all manner of development activities, complicated now by “hybrid” firms – those that have *both* a profit (or “earned income” in the more generally used language of nonprofits) and a social mandate. One immediate consequence is the growing academic interest in attempting to delineate the field, as broad as it is, resulting in a plethora of definitions for social entrepreneurship (Cho, 2006; Dacin, Dacin, & Matear, 2010; Dart, 2004; Peredo & McLean, 2006) which echoes decades of as-yet unresolved debate in extant literature on “what is entrepreneurship?”

It seems that before we can begin to claim that social entrepreneurship is a brand new phenomenon, and not simply a variation on the entrepreneurship theme, it behooves us to attend to at least two issues. The first (theoretical) issue is whether the term social entrepreneur is indeed a “new phenomenon” or whether it is simply a variant of the general

entrepreneurial theme. The second issue is that, even if we are encountering a new phenomenon, what are the long run performance prospects for social entrepreneurs?

The assumption underlying such widespread interest and activity is that these new approaches will succeed where the old did not. Although current fervor for social entrepreneurship is high, before we get carried away in the flood of enthusiasm, as happened with aid programs, we need to worry about whether this new thrust too will be pursued with huge expenditures of resources that will later turn out to be equally disappointing. Absent prospects for manifold successful social enterprises the current enthusiasm will surely wane.

Theoretical Problems

If we are to further examine these two issues keeping in mind the ideas of entrepreneurial incentives and Bauer's structure of payoffs, then we must also consider the enhancers of success and causes of failure, particularly the entrepreneur's ability to access the necessary resources of a scalable enterprise.

Problem of economic plausibility: In essence, Baumol's (and others') theory assumes that productive entrepreneurship can result from a shift in the structure of payoffs that also incorporates a societal dimension. However, his idea that entrepreneurial activity can spur economic growth was predicated on his admonition that expecting entrepreneurs simply to step up to the plate and create an enterprise to assuage demand for a social product or service is ingenuous. He suggests that there are important institutional and economic prerequisites for productive capitalist growth. Social entrepreneurship does not happen in a vacuum: for social enterprises to succeed, they must be able to overcome institutional constraints on their ability to generate returns. What will prevent the emergence of entrepreneurial solutions are lack of facilitating conditions such as clear property rights, the rule of law, a level playing

field for competition, limited corruption (low returns to destructive entrepreneurship) among others.

In the case of social entrepreneurs, many of the societal problems they wish to attack, like hunger, disease, education, employability and so on, are currently highly intractable. As an iconic economist might put it: “If the problem were tractable, some profit-seeking enterprise would already be making profits resolving it.” The general condition that leads to some of the most distressing states of poverty is that of market failure: despite enormous demand for desperately needed products and services in many cases markets simply have not emerged. If it transpires that the social entrepreneur, uniquely among entrepreneurs, has to contend with market failure in the absence of facilitating conditions, there is justification for a claim that social entrepreneurship be regarded as a new phenomenon.

Problem of opportunity costs: Secondly, for social enterprises to attract funding and resources, they must provide a payoff structure that both potential entrepreneurs and potential investors deem superior to alternative allocations of their time and resources.

However, the profit prospects for social entrepreneurs are lower returns accompanied by higher risk. Indeed, as Thompson and MacMillan (2010) have argued, the conditions under which social enterprises and their nascent markets need to be created are characterized by high uncertainty along some, or all, of the following dimensions: market, pricing, costs infrastructure, governance, technology, competitive response, objectives and even desired outcomes - what I call “near-Knightian” conditions. Furthermore, there is considerable evidence in the literature that most entrepreneurial ventures either fail (Bruderl, Preisendorfer, & Ziegler, 1992; Camerer & Lovallo, 1999; McGrath, 1999; Singh, Tucker, & House, 1986), or fail to grow into attractive high-value organizations⁴. In fact, manifold

⁴ U.S. Small Business Administration, Office of Advocacy. Data provided by the U.S. Bureau of the Census: Longitudinal Business Database 1977-2009, available at <http://www.sba.gov/advocacy/849/12162>.

authors have bemoaned the success bias of the literature. Clearly the prospects for success of social entrepreneurs may be even lower than for the more traditional entrepreneur in a developed market, since they will face not only the more conventional challenges but will have to do so with fewer prospects of returns and under near-Knightian conditions (Thompson & MacMillan, 2010).

The fundamental problem is that these conditions pose huge challenges to Baumol's advice to configure payoff structures in such a way as to encourage positive entrepreneurship, leading one to ask why an entrepreneur (or other providers of resources, like capital or labor) would incur the risk of supporting such enterprises when the resources could be devoted to other opportunities with greater return and lower risk. A logical expectation, therefore, is that success is far from the norm.

Despite the challenges, many social entrepreneurs are entering the space, intent on addressing human suffering with entrepreneurial endeavors. Yet we know little about the scope, nature and character of the challenges that social entrepreneurs face as they strive to alleviate societal ills *and* make a profit in doing so. To date, the author has been unable to identify extant literature that articulates these challenges. In this dissertation I propose to use field studies to start the process of identifying recurring challenges that social entrepreneurs are likely to encounter as they undertake their worthy enterprises.

I am particularly interested in challenges that stem from near-Knightian conditions that social entrepreneurs face. If we can begin to understand, anticipate, and alert aspiring social entrepreneurs to such challenges, this may increase the success rates of these desperately needed enterprises and create momentum for follow-on economic activity. This leads to my research question:

Research Question:

“What recurring challenges do for-profit social entrepreneurs face in attempting to restructure payoffs under conditions of near-Knightian uncertainty?”

The intent here is to build theory and advance our understanding of social entrepreneurship on a number of fronts. First, it is hoped that this work will add to the extremely thin body of for-profit social entrepreneurship literature. Second, the nonprofit sector has suffered severe funding cuts since the 2008 financial crisis. Should this work succeed in articulating recurring challenges, the learning may be transferable to the nonprofit sector and those nonprofits within it that are attempting to augment their funding by engaging in market-based earned income activities. Third, the corporate sector is under increasing pressure to visibly demonstrate and articulate to customers and stakeholders its contributions to society other than employment and profit. If we can convince managers of large corporations that there is a credible way to contribute by building future markets rather than paying mere lip-service and undertaking the (minimum) required Corporate Social Responsibility initiatives, we can perhaps motivate and engage the most powerful of allies in societal wealth creation.

To this end, Chapter 2 is a literature review comprised of selected materials from the following literature streams: social entrepreneurship, innovation, and managing uncertainty. The purpose of the literature review is twofold: First, I articulate the chosen research domain within extant literature; and second, I use the literature to establish a set of expectations prior to field research initiation, which in turn provides for the post-study comparison of findings versus expectations, and theoretical discussion.

I describe the research design and methods in Chapter 3 and apply a research scheme drawn from the social sciences to do so. In Chapter 4 I describe in detail each field study in

accordance with Popper (1963), as presented in Koertge's schema (Morgan, 2012, upcoming) referred to above. In Chapter 5 I present my findings in the form of inductive insights and propositions. I emphasize that these findings are not intended to be normative in nature, but are presented as propositions for further research in an emerging field of academic inquiry. The dissertation concludes with a discussion of results, implications for theory, limitations, and future research pathways in Chapter 6.

2. Social Entrepreneurship

Despite the many criticisms of the traditional aid model discussed so far, aid to foreign countries continues, and the (failed) model seems poised to be exported to even more recipient countries, including those whose populations have revolted in the recent ‘Arab spring’. More recently, however, members of the development community have expressed a change in thinking with respect to development. This shift is seen in the statements below, which marry policy with funding in a manner that is likely to increase the focus on, and support for, public-private partnerships, thereby driving increasing numbers of cross-sector initiatives between nonprofits and for-profits.

“I see a shift from charity to investment, and it is a good thing.”⁵

“In its new policy on development cooperation, the European Commission endorses the role the private sector plays in development.”⁶

Ben Knapen, minister for European affairs and international cooperation, The Netherlands, on the new EU policy on development cooperation.

“We must partner with the private sector much more deeply from the start, instead of treating companies as just another funding source for our development work.”⁷

Rajiv Shah, USAID administrator

“President Obama, in his presidential policy on development, said, let’s imagine the conditions where aid is no longer needed and let’s do it with economic growth; and we need

⁵ Source: www.devex.com. October 11th 2011

⁶ <http://www.minbuza.nl/en/news/2011/10/european-commission%E2%80%99s-new-development-cooperation-policy-encouraging.html>. October 8th 2011

⁷ <http://newsletters.devex.com/link.php?M=168312&N=13546&L=203907>. October 27th 2011.

public-private partnerships.”⁸

Maura O’Neill, USAID’s senior counselor and chief innovation officer.

*“The new face of America overseas, often privately funded, can be very positive.”*⁹
Sam Worthington, InterAction’s president & CEO.

*“As Obama noted earlier this fall during his landmark development policy speech at the United Nations, ‘aid alone is not development,’ and in addition to diplomacy, other policies like trade and investment are essential pieces of the puzzle.”*¹⁰

Noam Unger, a Global Economy and Development Fellow and the Policy Director of the Brookings Institution’s Foreign Assistance Reform Project.

Such shifts in policy, combined with financial backing, are likely to accelerate the emergence of new organizations in the form of social, or development enterprises, in response to a new payoff incentive, introduced in Chapter 1 (Bauer, 1972; Baumol, 1993a; Shleifer, 2009). Furthermore, a sharper spotlight on recipient firms and the profit mandate of larger private sector companies will likely precipitate new questions with regards to the nature of social enterprise. So what are social enterprises, and how is social entrepreneurship defined? Let us turn to the literature for current perspectives on these questions.

⁸ <http://www.devex.com/en/articles/usaid-s-new-idea-open-for-business-partnerships>. October 24th 2011

⁹ <http://www.interaction.org/article/usaid-looks-private-partnerships> November 22nd 2012

¹⁰ <http://www.interaction.org/article/qddr-following-through-civilian-power> November 22nd 2012

Current Conceptualizations of Social Entrepreneurship

Although social entrepreneurship has been a topic of interest for academics and practitioners for almost two decades “conceptual studies far outnumber empirical studies, and empirical efforts often lack formal hypotheses and rigorous methods” (Short, Moss, & Lumpkin, 2009). In turn, many of the conceptual studies revolve around defining the concept (Mair & Marti, 2009; Peredo & McLean, 2006), yet beyond some centrality around the attendance to social problems by “leveraging resources” there is little consensus (Dacin et al., 2010).

Dees (1998) posits a social enterprise spectrum (Table 2.1) as ranging from the purely philanthropic to the purely commercial.

Table 2.1: The Social Enterprise Spectrum

		Purely Philanthropic	←————→	Purely Commercial
Motives, Methods and Goals		Appeal to goodwill Mission driven Social Value	Mixed motives Mission and market driven Social and economic value	Appeal to self-interest Market driven Economic Value
Key Stakeholders	Beneficiaries	Pay nothing	Subsidized rates, or mix of full payers and those who pay nothing	Market-rate prices
	Capital	Donations and grants	Below-market capital, or mix of donations and market-rate capital	Market-rate capital
	Workforces	Volunteers	Below-market wages, or mix of volunteers and fully paid staff	Market-rate compensation
	Suppliers	Make in-kind donations	Special discounts, or mix of in-kind and full-price donations	Market-rate prices

Source: Dees, Gregory 1998 Harvard Business Review, pp. 55-67

Current definitions of social entrepreneurship not only span the spectrum above, but they also conflict, or suggest exclusion of one organizational form over another. For example Dart (2004) confines the construct to the nonprofit sector while others suggest that innovative, social value creating activities, can occur within or across the nonprofit, business, or government sectors (Austin, Stevenson, & Wei-Skillern, 2006). Hockerts (1985) imposes limitations on the construct and defines social purpose ventures as “hybrid enterprises straddling the boundary between the for-profit business world and social mission-driven public and nonprofit organizations. Thus they do not fit completely in either sphere.”

For a thorough review of the current literature on social entrepreneurship see Dacin, Dacin and Matear (2010) and the Appendix which reflects the breadth of definitions and range of perspectives and suggests that the literature has not yet “achieved a balance” (Dacin et al., 2010).

A considerable number of the extant definitions revolve around the characteristics of the social entrepreneur. In one conceptual discussion the social entrepreneur is categorized as one of three types: social *bricoleur*, social constructionist, or social engineer (Zahra, Gedajlovic, Neubaum, & Shulman, 2009). Hemingway (2005) introduces the notion of “active or frustrated corporate social entrepreneurs...distinguished by their individualistic or collectivist personal values”, thereby extending the concept into the corporate social responsibility sphere, further broadening the scope of the construct.

Some definitions focus on processes or operating sector of the venture. Robinson (2006) notes: “social entrepreneurship is a *process* that includes: the identification of a specific social problem and a specific solution... to address it; the evaluation of the social impact, the business model and the sustainability of the venture; and the creation of a social mission-oriented *for-profit* or a business-oriented *nonprofit* entity that pursues the double (or triple) bottom line.” While other definitions focus on the identity of the founder. Fauchart

and Gruber (2011) reach into the social entrepreneurship domain by casting light on the identity types of founders. Their “Missionaries...produce for those consumers where they expect the greatest impact; ultimately society is their audience.” Intriguingly, they “tend to address new social practices...” which is one of the consistencies with the related social entrepreneurship literature. Table 2.2. below reflects the founder identity type and also the “core strategic decisions” in new firm creation.

Table 2.2: Founder Identity Types and Core Strategic Decisions in New Firm Creation

		Darwinians	Communitarians	Missionaries
Core strategic decisions in new firm creation	Market segment(s) served	<ul style="list-style-type: none"> - produce for the average consumer or for quickly growing segments (the criteria of likelihood and value drive the choice of market served) - tend to serve additional segments over time / extend applications to new segments in order to achieve firm growth 	<ul style="list-style-type: none"> - “our customers are like us” (the criterion of similarity drives the choice of market served) - stick to initial segment addressed because it is the only place perceived as legitimate 	<ul style="list-style-type: none"> - produce for those consumers where they expect the greatest social impact; ultimately society is their audience - may serve additional segments, if this allows the firm to leverage its socio-political mission
	Customer needs addressed	<ul style="list-style-type: none"> - tend to address known dimensions of merit (e.g., safety, ease-of-use) - derived from market analysis 	<ul style="list-style-type: none"> - tend to address novel kinds of customer needs - derived from own needs 	<ul style="list-style-type: none"> - tend to address new social practices (new modes of consumption or production) - derived from what the founder would like the world to become
	Capabilities and resources deployed	<ul style="list-style-type: none"> - focus on cost-effective and mass-production methods (which are necessary to reach profitability) - international sourcing of production capabilities (if needed) - value IP protection / help in achieving business goals 	<ul style="list-style-type: none"> - tend to use highly individualized and artisanal production methods (products considered works of art) - reliance on personal capabilities - reluctance to use IP protection within community / would run counter to sharing values 	<ul style="list-style-type: none"> - focus on socially responsible production methods - sourcing from suppliers that match strict criteria (according to mission) - demonstration of firm capabilities in order to diffuse the exemplary model

Source: Fauchart and Gruber Fauchart and Gruber (2011)

In a similar vein, Dacin et al delineate distinctions among types of entrepreneurs along mission and process / resource dimensions.

Table 2.3: Distinctions Among Types of Entrepreneurs

	<i>Conventional</i>	<i>Institutional</i>	<i>Cultural</i>	<i>Social</i>
Definition	An agent who enables or enacts a vision based on new ideas in order to create successful innovations (Schumpeter, 1950)	An agent who can mobilize resources to influences or change institutional rules, in order to support or destroy an existing institution, or to establish a new one. (DiMaggio & Powell, 1983)	An individual who identifies an opportunity and acts upon it in order to create social, cultural, or economic value. (DiMaggio, 1982; Wilson & Stokes, 2004)	An actor who applies business principles to solving social problems.
Wealth distribution	Shareholder	Shareholder and/or stakeholder	Shareholder and/or stakeholder	Shareholder and /or stakeholder
Predominant organizational form	Profit	Profit	Nonprofit or profit	Nonprofit or profit
Primary goal (or motives)	Economic	Institutional reform/development	Cultural diffusion/enlightenment	Social change/well-being
Product	Create and/or distribute consumer product or service	Establish legitimacy	Establish new norms and values	Promote ideology/social change
Tensions	Growth versus survival	Resistance to change (isomorphism versus competitive advantage?)	Commercialization versus culture (authenticity)	Economic sustainability
Examples	Business service providers	Edison	Museums	Aravind Eye Clinic
	Software developers	Kodak	Folk art festivals	Greyston Bakery
	Tourism companies	Apple	Symphony orchestras	Rugmark

Source: Dacin, Dacin & Matear, 2010, p. 44

Of interest is the articulation, or assumption, that the “tension” faced by the social entrepreneur is “economic sustainability versus social mission”. This perspective is not shared by the Darwinians of Fauchart and Gruber: “Missionaries advocate new social practices that they perceive as having universal scope. They believe that the purpose of their firm is to show that alternative practices are feasible and to demonstrate to society how the

status quo can be changed (e.g., the way society consumes its resources, the way society engages with the planet). In this sense, the “relevant other” for missionaries is not a particular group of individuals or firms but society at large.”

This apparent contradiction begs the question: Does social entrepreneurship require a trade-off between economic sustainability and social mission?

2.1 Dissertation Focus

Traditional development aid models are not working and we are witnessing a change of thinking. A key aspect of this new thinking is social entrepreneurship; however, there is little agreement on what these organizations are, or whether they are a viable answer to the admittedly outmoded traditional models of development. The focus of this dissertation is to add to the literature by looking at for-profit social entrepreneurship start-ups and documenting the challenges they faced under near-Knightian conditions.

At the start of this research much of the extant literature alluded to for-profit social entrepreneurship, but when compared with the nonprofit work, there was little material available for the researcher interested in the for-profit perspective. However, I was involved in the Wharton Societal Wealth Program (WSWP) the basic hypothesis of which was that, under certain conditions, entrepreneurship could be used as a tool to combat social problems. I therefore elected to investigate for-profit social entrepreneurship with the aim of building theory, thereby contributing to the emerging field of academic interest.

In order to assess the current body of literature, and target a focused niche, I selected the 30 most cited articles on social entrepreneurship, and added to them any article published in an “A” journal. I summarized each article along the following dimensions which I deemed useful theoretical categories for an emergent body of literature:

- Institutional / environmental factors responsible for success or failure
- Definition / delineation of the field
- Nonprofit / for-profit / both
- Content (what the social entrepreneurial firm does)
- Process (the processes deployed by the social entrepreneur)
- Motivation of the social entrepreneur
- Outcomes of social entrepreneurial ventures

None of the articles studied comprehensively attend to each of the above aspects of a for-profit social entrepreneurship venture. Fewer than two of the articles spell out in much detail the processes followed by the social entrepreneur in establishing the venture. To date, the literature on for-profit social entrepreneurship remains sparse. This view is shared by Martin and Osberg (2007) who state : “Social entrepreneurship is attracting growing amounts of talent, money and attention. But along with its increasing popularity has come less certainty about what exactly a social entrepreneur is and does.” Citing Thompson and MacMillan (2006) Dacin et al (2010) note that the social entrepreneurship context “brings into relief an increasingly important concern that all forms of business face: how to weave social and economic concerns into the fabric of organization management, to the mutual satisfaction of stakeholders. The dual mission of social entrepreneurial ventures provides both interesting opportunities and constraints.” They conclude their assessment of the social entrepreneurship literature by suggesting that “the most significant opportunity resides in better understanding of the distinctive nature of the mission, processes, and resources leveraged in a social entrepreneurial context.”

This dissertation begins to attend to the calls made above. As a means to move forward within a domain absent boundaries I reduced the literature to the following challenges we might expect a for-profit social enterprise to face: *social impact versus economic gain; the development of innovative / new solutions*. The purpose of this exercise

was to establish a basic set of expectations in preparation for the field studies. I then considered the related literature streams of innovation and the management of uncertainty as a means to broaden and confirm, or refute, these expectations. A brief overview of each these two literature streams follows.

2.2 Innovation

An extensive volume of academic work holds that innovation and entrepreneurship are important drivers of growth and competitive advantage of firms and economies (Baumol, 2002; Chaney & Devinney, 1992; Loury, 1979; McGrath & MacMillan, 2000; Porter, 1990; Schumpeter, 1942; Solow, 1957; Utterback & Suarez, 1993; von Hippel, 1988).

The literature has accumulated from a wide variety of perspectives and theoretical influences, some of which are presented briefly below. Dosi (1988) states “various forms of innovations affect all sectors of economic activity” and that progress in the “the empirical analysis of the innovative process within and across industries...is often constrained by scarcity of the relevant data...”. Although he makes it clear it is not his purpose to review the whole body of innovation-related literature (pg 1121), he nevertheless provides a thorough framework of analysis for the main characteristics of the innovative process; the factors that contribute toward or restrict the development of new processes of production and new products; and processes that determine the selection of particular innovations and their effects on industrial structures. Baumol (1993b) investigates the optimal timing of an innovation but recognizes that innovation is typically continuous in practice. Dougherty (1990) states that “a comprehensive understanding of customer needs contributes significantly to the commercial success of new products” but shows that “understanding new markets is difficult for innovators in large firms”.

Innovation is also studied by scholars at multiple *levels* of the firm ranging from policy to new product development (Nerkar & Roberts, 2004). It is a crucial activity for the long-term survival of an organization and as such continues to draw significant interest from scholars world-wide. There are, however, a number of limitations to innovation in firms, the most obvious of which is the *cost* of innovation (Barney, 1986; McGrath, 1999). The introduction of limitations to the scope of innovation naturally introduces the concept of trade-offs. Simply put, firms are constrained by available resources and are forced to make trade-offs between activities within any given possibility set. This concept is perhaps nowhere better explored and made clear than in the entrepreneurship literature where “bootstrapping” and “opportunity registers” represent the realities of lean or scarce resources and necessity of choice (Timmons, 1999, McGrath & MacMillan, 2000).

The notions of scarcity and resources were raised by Hayek (1945) when describing planning as the complex set of interrelated decisions about the allocation of available (lean) resources. Furthermore, planning is non-trivial. Aside from the stewardship of resources with a view to fiduciary responsibility, the development of absorptive capacity, and in turn, innovative performance, are history - or path-dependent (Cohen & Levinthal, 1990; Gruber, MacMillan, & Thompson, 2008). Non-investment in an area of expertise or strategic interest early on may preclude the future development of a technical capability in that area. This notion of the strategic deployment of resources is noted by Barney (1986, 1991), where the economic performance of firms does not depend simply on whether or not its strategies can create imperfectly competitive markets from which to obtain greater than normal economic performance, but also on the *cost* of implementing those strategies.

Innovation is clearly a necessity for sustained firm growth and performance, however, innovation activities require firm resources which are limited (Jarillo, 1989). In lean-resource settings, such as many social entrepreneurship environments, such limitations are exacerbated

in that factors of production are not only scarce, but sometimes absent. As is the case with the regular entrepreneur, we can therefore expect the acquisition and management thereof to be of central concern to the social entrepreneur (Timmons, 1999). I therefore add ‘*resource accrual in lean-resource settings*’ to the expectation set.

Additionally, innovation and newness may result in the separation of one evolving population from its antecedent population, which in turn allows populations to follow different evolutionary paths (Adner & Levinthal, 2002). Such pathways are neither obvious nor visible to all entrepreneurs (Gruber et al., 2008; Kirzner, 1997; Schumpeter, 1942; Shane, 2000), are often discovered through exploration (March, 1991) or distant search (Cyert & March, 1963; Katila & Ahuja, 2002), and can sometimes (unpredictably) have disastrous effects on industry incumbents (Henderson & Clark, 1990). Given the inherent uncertainties of failed markets, the unpredictability of solution, and the potential effects thereof, I reviewed the management literature on risk and uncertainty with a view to expanding the set of expectations outlined above.

2.3 The Management of Uncertainty

If you don't know for sure what will happen, but you know the odds, that's risk if you don't even know the odds, that's uncertainty (Knight, 1921).

In Mintzberg's (1978) seminal paper on patterns in strategy formation he notes that strategy can be viewed as the interplay between a dynamic environment and bureaucratic momentum with leadership mediating between the two forces. The term *emergent strategy* is coined in this paper suggesting that strategies are not only the result of formal planning processes, but also emerge over time. He goes on to comment that the interplay between the intended and unintended strategies may lead “to the heart of this complex organizational process”.

The inherent uncertainty of innovative opportunities makes it difficult for managers to arrive at sound evaluations of the value of such market opportunities; or an evaluation may even be impossible under conditions of Knightian uncertainty, where outcomes are unknowable (Knight, 1921). Such uncertainty leaves managers in firms with an uncomfortable dilemma. On the one hand they are required to innovate in order to survive and grow; and on the other hand they are required to exercise fiduciary responsibility when making decisions with respect to resource allocation. However, as March (1991) argues, an imbalance weighted toward exploitation rather than exploration, is likely effective in the short-run but destructive in the long-run.

The evaluation of uncertain opportunities is non-trivial (Bowman & Moskowitz, 2001; McGrath & MacMillan, 1995). Many environments in which many social entrepreneurs operate are not only resource-poor; they are also environments of high, or near-Knightian uncertainty and contain some, perhaps all, of the following elements of uncertainty: imperfect markets, uncertain prices or costs, nonexistent or unreliable infrastructures, imperfect or absent formal governance, untested applications of technology, and unpredictable competitive responses. In some cases, even the initial objectives and desired outcomes might be unclear (Thompson & MacMillan, 2010).

John Adams (2002) extends his commentary on Knight's work to common practice:

Uncertainty as defined by Knight is inescapable. It is the realm not of calculation but of judgment. There are problems where the odds are known, or knowable with a bit more research, but these are trivial compared with the problems posed by uncertainty... If one retreats from the unattainable aspirations of precise quantification, one may find, I believe, some useful aids for navigating the sea of uncertainty.

Scholars and practitioners have begun addressing this planning-without-information quandary in recent years through the use of financial tools such as Real Options. Real Options Theory relates to classes of organizational investments that are similar in nature to financial options (Bowman & Hurry, 1993; Dixit & Pindyck, 1995). Just as the purchase of a “call” or a “put” option confers the right, but not the obligation, to buy or sell the underlying contract at a future date, so too does a corporate investment structured as a Real Option confer the right, but not the obligation, to invest in the project.

Currently, the most pervasively used means with which to evaluate the future attractiveness of an investment is a derivation of Discounted Cash Flow (DCF) analysis which assumes estimable costs and future revenues (Higgins, 2007). Similarly, nonprofits reflect institutional factors and state policies (DiMaggio & Anheier, 1990) and grant disbursements of most are typically made based on pre-planned expectations of execution and “overemphasize program design” (Letts et al., 1997). However, one of the key arguments presented against Net Present Value (NPV) when dealing with uncertain investments is that NPV - used interchangeably with DCF - is fundamentally flawed in that it contains implicitly the assumptions that investments are either reversible, or irreversible (van Putten & MacMillan, 2004). While there are certainly circumstances where these assumptions hold true, there are many business cases where they prove to be false. For example, “holding open” an option by using a potential joint venture partner for a period of time, managers are able to delay an infrastructure investment, thereby confounding the DCF argument of non-reversibility or non-irreversibility. Furthermore, it is argued that conventional planning cannot account for the uncertainty of new, “longer distance leaps” (McGrath, 1995; McGrath & MacMillan, 2000; van Putten & MacMillan, 2004). MacMillan and van Putten extend this position in stating that those companies that rely on DCF “underestimate the value of their projects”. They motivate for the complimentary use of the Real Options Reasoning (ROR)

and DCF methods, stating that as uncertainty is reduced, so is option value...and DCF value is increased. In near-Knightian environments we should therefore expect there to be predominantly “real option value” at project initiation with little DCF value. With the resolution of uncertainty, or learning, so disappears the option.

Zott and Amit (2007) find that “timing, cost, and learning effects foster the emergence of robust performance differences among firms with strikingly similar dynamic capabilities.” ROR has implicit in it the management of uncertainty, and therefore the need to learn in order to reduce uncertainty to risk, or defined variables. This forces the consideration that in learning will be the need, or opportunity, for redirection or project termination. In keeping with an entrepreneurial mindset we might expect this learning to be designed to take place at lowest cost, and, where possible, prior to making large investments.

Given the considerations above we might expect the profit prospects for social entrepreneurs to be lower returns accompanied by higher risk and higher uncertainty. Furthermore, there is considerable evidence in the literature that most entrepreneurial ventures either fail (Bruderl et al., 1992; Camerer & Lovallo, 1999; McGrath, 1999; Singh et al., 1986), or fail to grow into attractive high-value organizations¹¹. In fact, manifold authors have bemoaned the success bias of the literature. Clearly the prospects for success of social entrepreneurs may be even lower than for the more traditional entrepreneur in a developed market, since they will face not only the more conventional challenges but will have to do so with fewer prospects of returns and under near-Knightian conditions (Thompson & MacMillan, 2010). A logical expectation, therefore, is that de novo venture success is far from the norm.

¹¹ U.S. Small Business Administration, Office of Advocacy. Data provided by the U.S. Bureau of the Census: Longitudinal Business Database 1977-2009, available at <http://www.sba.gov/advocacy/849/12162>.

In addition to the expected challenges articulated earlier (*social impact versus economic gain; resource accrual in lean-resource settings; the development of innovative / new solutions; self-sustaining ventures*), I would expect to find the following to be additional high-level challenges a SWE would be likely to face: *Solution uncertainty, redirection, project failure, and cost uncertainty.*

Despite the obstacles to success, many social entrepreneurs are entering the space, intent on addressing human suffering with entrepreneurial endeavors. Yet, we know little about the scope, nature and character of the challenges that social entrepreneurs face as they strive to alleviate societal ills *and* make a profit in doing so. To date, the author has been unable to identify extant literature that articulates these obstacles. In this dissertation I propose to use field studies to start the process of identifying recurring challenges that social entrepreneurs are likely to encounter as they undertake their worthy enterprises.

However, with a focus on theory building, I am specifically interested in challenges which stem from the near-Knightian conditions that for-profit social entrepreneurs face. If we can begin to understand, anticipate, and alert aspiring social entrepreneurs to such challenges, this may increase the success rates of these desperately needed enterprises and create momentum for follow-on economic activity. This leads to my research question:

Research Question:

“What recurring challenges do for-profit social entrepreneurs face in attempting to restructure payoffs under conditions of near-Knightian uncertainty?”

The next chapter turns to the methodology deployed for the research presented in this dissertation.

3. Research Design

3.1 Research Strategy

Qualitative research often advances the field by providing unique, memorable, socially important and theoretically meaningful contributions to scholarly discourse and organizational life (Rynes & Gephart, 2004). In this section I describe the qualitative research methodology utilized in the dissertation. In principle I have followed the classic inductive procedure articulated below:

“The field researcher constructs this evidential trail gradually, getting an initial sense of the main factors, plotting the logical relationships tentatively, testing them against the yield from the next wave of data collection, modifying and refining them into a new explanatory map, which then gets tested against new cases and instance. This is the classic procedure of analytic induction, well codified by epistemologists.” (Miles & Huberman, 1984 p. 228).

In designing a research protocol I faced two distinct challenges. First, as I discussed in the previous chapter, the extant literature on for-profit social entrepreneurship was sparse, resulting in a paucity of quantitative or other empirical data available for study. Second, there were relatively few organizations with sufficient longitudinal data from which to draw an appropriate theoretical sample of cases (Eisenhardt, 1989; Pettigrew, 1990; Yin, 2009).

I therefore considered grounded theory as advocated by Glaser and Strauss (1967), who argue in favor of the need to go into a case “unencumbered” by the biases in the literature. However, having lived and worked in Southern Africa, it was certain that I myself carried biases based on education and experience that would likely influence my research. In discussing an appropriate methodology, Mary Morgan of the London School of Economics

dismissed my early concerns of insufficient structure and potential bias, and pointed out that Popper (1963), known mostly for his theory on falsifiability, and less for his contributions in the social sciences, decries the grounded theory approach, quoting Katz, and saying:

“Observation is always selective. It needs a chosen object, a definite task, an interest, a point of view, a problem... ‘*A hungry animal*’, writes Katz (1937), *divides the environment into edible and inedible things. An animal in flight sees roads to escape and hiding places...Generally speaking, objects change...according to the needs of the animal.*’ ...We may add that objects can be classified, and can become similar or dissimilar, *only* in this way – by being related to needs and interests. This rule applies not only to animals but also to scientists. For the animal a point of view is provided by its needs, the task of the moment, and its expectations; for the scientist by his theoretical interests, the special problem under investigation, his conjectures and anticipations, and the theories which he accepts as a kind of background: his frame of reference, his ‘horizon of expectations’.”

Therefore, with respect to research preparation, and in keeping with the view of Popper, I take the position that I cannot escape my own frame of reference and horizon of expectations (which I bring to the research question), and must therefore, of necessity, draw off relevant prior literature in an attempt to *avoid* some of the situational biases I bring with me. Hence the literature reviews in the preceding chapter.

Morgan (2012, upcoming) notes that: Popper characterized “situational analysis” as the method for economic analysis, arguing that explaining or predicting a “kind or type of event” is “most easily solved by means of constructing a model” where “the ‘models’ of the theoretical social sciences are essentially descriptions or reconstructions of typical social situations” (Popper, 1963/1994, pp. 163 and 166, his emphasis). This reconstruction includes not only the typical knowledge of the individual in such a situation, but also the environmental, institutional and structural relations within which the individual operates.

The universal laws found in the natural sciences are replaced by an “animating” or “rationality principle” consisting of acting “appropriately to the situation.” Here is where Popper’s work intersects with William Dray’s contemporaneous development of the argument that historical explanation should be based on the analysis of a “rationale” of action by the historical actors given their situations.

Note, here I draw attention to a further intersection, namely to Baumol in his commentary on the “structure of payoffs” as antecedent to the allocation of entrepreneurial resources within an economy. What the “structure of payoffs” is to Baumol (1990), is the “rationality principle” to Popper (1963), and is the “rationale of action” to Dray (1957). This intersection offers the researcher here a link from Baumol to Popper and Dray, thereby providing a bridge to Popper’s explanation of the social sciences represented in the framework below.

I acknowledge that in this instance Baumol’s focus is on the entrepreneur, whereas the focus of Popper and Dray has a broader and more inclusive set of possible actors or agents within the environment. The analogy, however, is well grounded in the respective literatures of the authors, does not conflict, and offers a useful basis off which to begin field study analysis since the authors hold a common view that individuals will act in a manner which makes most sense to them at the time of decision.

Morgan comments further: “Dray’s account of historical explanation was first formalized into a schema by Hempel (1961-2) and then by Noretta Koertge (1975, p. 440) in discussing Popper’s recipe for explanation in the social sciences as shown here...(Box 9.1)” The table below is extracted from Morgan’s upcoming book (Box 9.1) and modified by this author.

Table 3.1: Koertge's Schema

1. Description of the situation	Agent A was in the situation of Type C (Thompson insert: In-depth field study description)
2. Analysis of the situation:	In a situation of Type C, the appropriate thing to do is X (Thompson insert: Post-study findings / Coding / Inductive insights)
3. Rationality principle:	Agents always act appropriately to their situations (Thompson insert: they maximize their utility function/s / payoffs)
4. Explanandum:	(Therefore) A did X
<p>The idea is that an analysis of the situation combined with a principle of rational action will define what is logical (i.e. rational) for agents to do in a particular type of situation, and thus enable the social scientist to “explain” such actions. Since the description of the situation includes the relevant aims and knowledge of the agent, the rationality principle is “almost empty”, a “zero principle” (Popper 1963/1994, p. 169). It is not supposed to have empirical content, nor is it a psychological assertion. The consequence of Popper’s social science explanation is that we “pack or cram our whole theoretical effort, our whole explanatory theory, into the analysis of the situation.” (Popper, 1963/1993, p. 169).</p>	

Source: Noretta Koertge “Popper Metaphysical Research Program for the Human Sciences.” *Inquiry*, [1975] 18, 437-62, p. 440

The framework above offers a useful methodological structure for theory building in the niche of for-profit social entrepreneurship. When applied to an inductive field study, the framework tends naturally toward an explanation, or set of explanations (phenomena that need to be explained) that will be positioned in this dissertation as Inductive Insights and propositions. Certain recurring challenges emerged that were particular, but not unique, to the SWEs in this study. I observed that in response to the challenges social entrepreneurs did

certain things. Such observations are merely observations and are in no way intended to be normative. Specifically they are non-normative and are offered for further research.

Importantly, the “rationality principle” as articulated above enables me to discern between categories of agents by defining their utility functions, which, in turn, serves as a basis for examining their situation, and their responses to the problems within it (environment). For example:

Agent A = Charity / Aid Worker (Utility function: Social Impact via funds disbursement)

Agent B = For-profit Social Entrepreneur (Utility function: Social Impact + Profit)

Agent C = Entrepreneur (Utility function: Profit)

This is, to my knowledge, the first time such an approach has been used in the study of social entrepreneurship, and offers a novel lens through which to analyze the behavior of social entrepreneurs, and other stakeholders, in near-Knightian environments.

Note: The purpose of this dissertation is to answer the question “what recurring challenges do for-profit social entrepreneurs face in attempting to restructure payoffs under conditions of near-Knightian uncertainty?” This dissertation is not intended to result in normative findings and as such, I will undertake steps 3 and 4 of Koertge’s Schema only in the event of the need or desire to propose a possible motivation for, or explanation of, the actions of an agent during or after data analysis. In general, I expect challenges and insights to emerge during the description and analysis stages of research.

3.2 Research Setting

In brief, one institutional program exploring the concept is the Wharton Societal Wealth Program (WSWP). The basic hypothesis of the WSWP is that many social problems, if looked at through an entrepreneurial lens, provide opportunity for someone to launch a

business that can make a profit while attending to the social problem. The more the firm grows, the more profits are made, and the more of the societal problem attended to, thus creating a virtuous cycle.

Given my participation in the program, interest in social entrepreneurship, and gap in the body of literature, this appeared to be a rich opportunity from which to begin. I therefore chose to investigate the for-profit social entrepreneurship construct with particular emphasis on the challenges such entrepreneurs face as they try to generate and sustain profits while at the same time alleviating social suffering.

Each venture differed in terms of founder background, societal problem, legal and socio-political environment. As part of the WSWP I managed to secure unusually deep access to venture personnel, internal memorandums, company communications (via email), and financial statements. Since two of these ventures continue to operate I was asked to use discretion in regard to the publication of names and some specific data such as financial performance and sensitive negotiations. To comply with these requests I have in certain instances used pseudonyms and have excluded sensitive materials from publication in this dissertation. However, I have permission to utilize the circumstances and learnings from these events and materials.

When considering the research question of this dissertation it became evident that applying the well-developed longitudinal case study methodology (Eisenhardt, 1989; Pettigrew, 1990; Santos, 2009; Yin, 2009) would be a challenge for two primary reasons. Firstly, I was unable to identify a population of existing for-profit social entrepreneurship firms operating in highly uncertain environments. One might argue that they did not yet exist on a scale large enough to have been made easily visible to me. Secondly, I was interested in the structure of payments, and the implications of the alteration thereof, in near-Knightian environments, which meant that the research setting was likely to be on another continent

from the US. Africa was the natural choice due to the Wharton Societal Wealth program activities and my having contacts there. However, the distance introduced challenges of access, cost and communications.

Given the dearth of empirical data in the emerging field of social entrepreneurship I have deployed a unique research strategy which utilizes field research in the form of sequential and simultaneous field experiments (McGrath, 1993). The four SWEs studied in this dissertation were undertaken within the WSWP, which launched in 2001 as a field research program intended to examine the use of business models as a means to attend to social problems (Thompson & MacMillan, 2010).

Each venture represents an attempt by a social entrepreneur to attend to a societal need through the use of a profit-seeking business model. The cases represent conditions and experiences in three of the Sub-Saharan, African countries, namely Botswana, South Africa and Zambia. Each country has similarities but also unique differences and challenges, which will be explored in more detail in the next section of the dissertation. A brief overview of each project and country follows.

Feeds Program: Zambia, Africa (project initiated 2001)

Project Description

The northern region of Zambia had been severely adversely impacted with the fall in copper prices, and the resultant closure of large numbers of mines during the 1980's and 1990's. As a consequence unemployment and malnutrition were at extremely high levels. The goal of the program was to increase the availability of protein. This hypothesized approach was to enable the production of livestock in emerging economies by small-scale farmers as producers of higher quality, lower cost protein.

Author's Role

I adopted the role of observer and occasional strategic counsel. In 2003, once the venture had demonstrated proof-of-concept, I designed and coordinated the development of a Linear Programming application that was used by venture management to develop increasingly complex feed formulas, optimized for local nutrient availability and pricing. Once the program was in use, I augmented it with an inventory management program. Both applications were written using Visual Basic for Applications (VBA) in Excel in order that they might be deployed and operated on a low-cost notebook running a Windows operating system.

Entrepreneur: Agent Type "B": For-profit Social Entrepreneur (Expected utility function: Social Impact + Profit)

Medical Program: Botswana, Africa (project initiated 2003)

Project Description

Botswana's impressive economic gains were threatened by one of the world's highest known rates of HIV/AIDS. The goals of the program were (1) to increase healthcare capacity in lean-resource settings through the use of IT that enables nurses and other front line healthcare employees to increase their participation in the diagnosis and care of patients with critical diseases, and (2) to increase the life span and employment vitality of HIV/AIDS infected workers.

Author's Role

There were multiple phases in this project. I initially adopted the role of observer and resource coordinator. I introduced the software company to the entrepreneur in Botswana and assisted in locating an individual that could coordinate the program on-site for both the

owner-clinician and the software company. The software company that developed the electronic medical record (EMR) was based in the US, specialized in HIV/AIDS patient management, and had operations in a number of Southern African countries. .

Entrepreneur: Agent Type “B”: For-profit Social Entrepreneur (Expected utility function: Social Impact + Profit)

Baked Goods Program: South Africa, Africa (project initiated 2005)

Project Description

Many of South Africa’s township residents suffer from acutely high levels of unemployment. Many women and mothers are uneducated and have never been employed. The founder of the business built the baking company to provide employment to underprivileged women as well as provide them with workplace training and transferable skills in order that they become employable and self-sufficient.

Author’s Role

I adopted the role of observer and occasional strategic counsel. In 2005, once the entrepreneur had made the decision to attempt to scale the business and export to the US, I assisted her in raising capital from a venture philanthropist. While in the US we provided her with access to the Wharton networks for purposes of building a logistics and distribution chain.

Entrepreneur: Agent Type “B”: For-profit Social Entrepreneur (Expected utility function: Social Impact + Profit)

Widows and Orphans Program: Zambia, Africa (project initiated 2008)

Project Description

As a consequence of mining accidents in the Chambishi area a poultry out-growers scheme was launched (by a 3rd party) to enable widows of deceased miners to produce poultry in order to support themselves and their children / grandchildren. The feed company provided training and inputs to widows and orphans who raised the broiler chicks to maturity. Birds were then collected, sold at market, and profits less costs distributed to the growers. Demand for participation in the scheme was extraordinarily high and scheme managers experienced highly visible political interest as well as support from local authorities who enjoyed reduced pressure from the unemployed widows for support.

Author's Role

I met with the first entrepreneur and conducted an informal interview in order to learn of his experience and gain insight into why he thought the venture had failed. I conducted further informal interviews with two members of his management team as well as nine beneficiaries of the program. After complete disengagement from the project I was asked by a philanthropist to consider the feasibility of re-launching the project in order to reach a much larger scale. My analysis, described later herein, informed the final decision with respect to the proposed project relaunch.

Entrepreneur: Agent Type “B”

For-profit Social Entrepreneur (Expected utility function: Social Impact + Profit)

3.3 Level of Analysis

This dissertation investigates the implications of a change in the structure of payoffs from the donor model to the simultaneous generation of a) positive social impact and b) profit by a for-

profit venture in near-Knightian environments. Two of the key characteristics of such environments are the scarcity of resources and the competing demands for them. The accrual and deployment of a SWE's resources are determined at the level of the firm, and its investors. As such the firm will be the level of analysis. Macro-economic effects and considerations, whilst relevant to the field, are outside the scope of this dissertation.

3.4 Methodology

This section outlines the research design and methodology deployed for the dissertation. The qualitative design process I used follows the guiding principles and outline as used by Miles and Huberman (1984).

My selection of sample is influenced partially by theory and partly by feasibility and possibility considerations (Eisenhardt, 1989; McGrath, 1995; Yin, 2009). Such an approach for exploratory research in an emerging field is typical (Burgelman, 1983; Dougherty, 1990; Gersick & Hackman, 1990; Mintzberg & McHugh, 1985).

Field research projects were selected opportunistically in the Southern African Region and the United States. Each project was approached as a field experiment in which I was able to observe field experiment initiation and monitor the development of the activity. During this time I collected data in the form of organizational communications documents, management meeting memos, corporate communications emails, financial statements, reported and un-reported and in situ observation (Barley, 2006).

Each field project was studied in a manner that would enable the sequential and cross-experiment assessment of qualitative data to 1) yield insight in the form of expectations affirmation of extant literature, 2) uncover anomalies from expectations¹², and 3) uncover

¹² A logical and appropriate field research methodology for theory building as discussed between Ian MacMillan and Rosabeth Moss Kanter and later shared with the author.

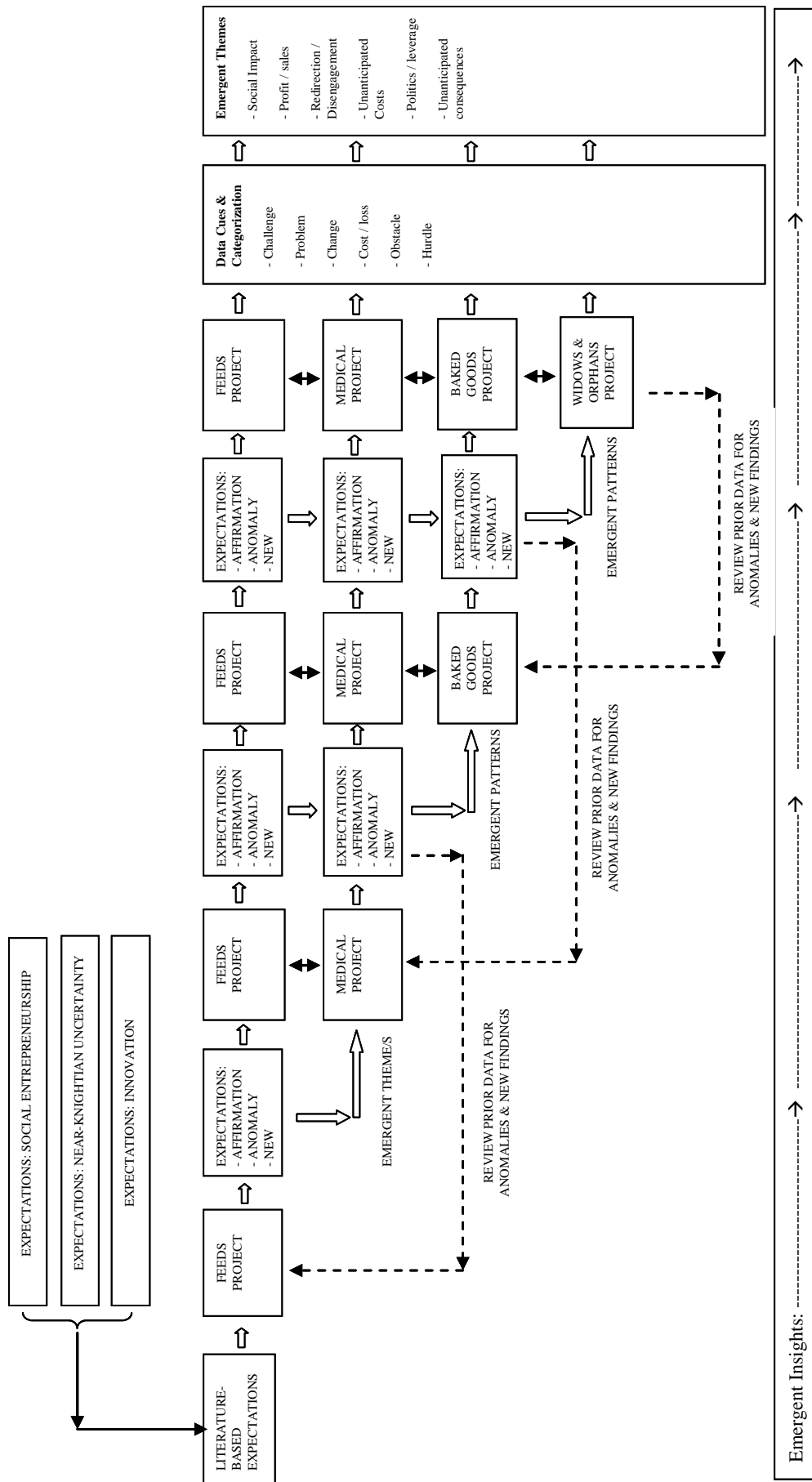
new findings (Miles & Huberman, 1984). The following is an outline of the basic early conceptualization of research design:

- Launch a field experiment as a unit of study
 - What did we expect to see?
 - What did we see that we expected (affirmation)?
 - What did we see that we did not expect (anomalous)?
- New findings
- Revise expectations
 - What do we expect to see in the next case?
- Case comparisons
- Move forward
- Revisit findings

Using the structure of payoffs theme as the core lens through which to consider the allocation of payments, entrepreneurial talent and resources, I chose to follow an inductive theory-building approach in the form of a progressive study of multiple for-profit field research initiatives in sub-Saharan Africa that were part of the WSWP. I started with one experiment, used the learnings to pursue the next experiment and then the third and finally applied the progressive learnings to the fourth. Each field experiment was designed to explore and unfold recurring barriers to success of the venture. I expected that these barriers might yield insights into the implications of change to the underlying structures of payoff in each market.

Figure 3.1 reflects the schema of the methodology. Note the progressive, sequential, and iterative nature of the data collection and analysis.

Figure 3.1: Field Research Design and Execution



3.4.1 Data

Each field research project was treated as an independent activity, unique to its environment, and was designed to yield insights with regards to the development or “lack of success” of a for-profit social entrepreneurship venture. Depending on the project management permissions and availability of materials, I was provided with access to marketing materials, internal memorandums, financial reports, board reports, project presentations, and the ability when on-site to observe operations.

Email communications between entrepreneurs and key stakeholders were a substantial source of raw qualitative data. By analyzing these messages I was able to identify distinct “genres”, or themes of emails and the points in time at which they emerged. By relating the genres appearance to important events and challenges I was able to show how the genres contributed to the ventures development, hindrance and success / lack thereof (Barley, 2006) (Orlikowski & Yates, 1994). The constant stream of email communications and occasional solution-seeking intervention orchestrated by strategic partners, or coordinated by our team, facilitated rich insight into each venture. The seeking out (Cyert & March, 1963) and absorption of environmental information (Cohen & Levinthal, 1990; Cyert & March, 1963) and subsequent codification of knowledge (Boisot, 1998) into a problem-solving solution offered the author and co-investigators the opportunity to gather deep insight into organizational challenges in near-Knightian environments (Knight, 1921; Sarasvathy, Dew, Read, & Wiltbank, 2008; Thompson & MacMillan, 2010).

3.4.2 Phase 1: Data Collection

I gathered data during each experiment as per Table 3.2 below.

Table 3.2: Coding Phase 1

Name of Case	Memos (pages)	Emails (pages)	Financial Statements / Excel Docs (pages)	Word Documents (pages)	Presentations (PowerPoint) (pages)	Observation Days Spent in Country
Feeds (Zambia)	368	423	1866	303	153	17
Medical EMR (Botswana)	682	2025	107	418	98	16
Baked Goods (South Africa)	520	3755	556	163	290	8
Widows & Orphans (Zambia)	34	104	80	27	18	2
Total # of Occurrences	1604	6307	2609	911	559	43

Next, I designed a categorization and reference schema that would allow efficient and accurate record coding and retrieval. Data were then manually classified by data source type in preparation for further coding and examination. Each record was converted to hard copy, assigned a record reference, and filed in preparation for coding. The schema developed and utilized is as follows:

A. For each case study, a matrix was designed. The matrices comprise of the following details:

- i. Date
- ii. Event
- iii. Details
- iv. Information source (i.e., email, memo, etc.)

1. A simple set of abbreviations was created to identify key documents such as excel documents, word documents and power point documents. The acronyms used are as follows:

- a. E = email
- b. ADB = access database
- c. MEM (used in rare instances) = memory
- d. INV = invoice
- e. CT = contract
- f. DOC = physical document such as an internal memorandum or Board Report.
- g. PDF = PDF document
- h. PP = power point presentation
- i. EX = excel
 - i. This category is inclusive of financials, board reports and discovery driven plans (DDP's)

2. The date of the document was entered next to the abbreviation. For example:

- a. E01012010 = Email sent/received on January 01, 2010

3.4.3 Phase 2: Analysis - Creating a Data Sub-Set

The core idea of the research design was to focus on challenges that inhibit progress of near-Knightian ventures, in other words implementation challenges. I undertook a sequence of experimental projects, using the first project to generate initial insights specific to the project and progressively using follow-on projects to identify recurring patterns of challenges.

There are manifold challenges in the literature; hope was to uncover recurring challenges pervading near-Knightian projects. To do this, I first needed to create a data sub-set which pertained to obstacles and challenges faced by the management of the SWE. In other words “what gets in the way of success?” I used the literature to identify “cues” in the documents that indicated that the generator of the document was wrestling with a challenge (McGrath, 1995, 1999; McGrath & MacMillan, 2000; Utterback, 1971). Identified cues were:

- Challenge
- Problem
- Change
- Cost / loss
- Obstacle
- Hurdle
- Complexity
- Bad

In each project I identified at least one other coder to search the documents for these cues and parse out a subset of the initial document set that pertained to challenges. This required meeting with each coder and reaching agreement with them on the cues they would look for. These tended to be context specific – for instance one of the cues chosen was “bad” – in the African context it is commonplace to use the term things are “bad” to indicate that there are problems.

The list of cues was not meant to be exhaustive – there are probably several hundred words that could connote challenge, but what we did agree on was words that comprehensively captured the concept of challenges in the context. Our focus was primarily on e-mails which in these cases are the “documents of execution” – capturing specific real time and current communications among stakeholders relating to what is actually happening or not happening in the project.

At this stage I was not concerned with the nature of the issue or the context. We merely extracted the relevant documents to the challenge and created a subset of the much larger dataset. This process was done manually. All email, notes, memorandums, board reports, consulting project work and financial result documents were filed by date and type of record in preparation for the next coding phase.

Once this subset of documents had been parsed out they were perused to find project specific cues indicating a challenge being experienced. These were project specific, and so the next challenge was to review the project specific cues and begin to extract a more generic term that captured the more generic concept.

An example of two related, referenced and classified documents, drawn from the Baked Goods experiment, follows:

Tony's agrees to supply brownies (2,000) at agreed price	E03092007
Tony's sends email saying they won't honor the price	E03082008

In an email dated the 9th of March, 2007 a vendor, Tony’s Bakery, agreed to supply baked goods product at an agreed price. On year later on the 8th of March, 2008 the vendor reneged on the price causing a major production/market challenge for Khaya Cookies, the Baked Goods Company.

3.4.4 Phase 3: Analysis Searching for Emergent Themes and Patterns

We then searched within the document sub-set for emergent themes and sub-patterns. The following meta-themes began to emerge from the studies. In each of the records we searched for reference to these themes and logged the occurrence in a summary document. This summary document developed over time as we moved through the next coding and analysis phases.

- i. Unanticipated consequence
 - 1. Unexpected, after effect, chain reaction, fallout, reaction, repercussion, surprise, shock
 - 2. Unraveling, unravelment
- ii. Redirection
 - 1. Alter, avert, change, deflect, modify, swerve, switch, veer, disengagement, break, disconnection, disentanglement, release, separation, severing, withdrawal, terminated, away
- iii. Leverage / socio-politics
 - 1. Advantage, ascendancy, authority, bargaining chip, break, clout, drag, edge, jump on, power, pull, rank
- iv. Social impact
 - 1. Patient impact, employment, training, nutrition, food, education
- v. Profit / Sales
 - 1. Accumulation, acquisition, advancement, advantage, aggrandizement, bottom line, earnings, gross, margin, interest, proceeds, remuneration, return, revenue, saving, surplus, yield, income, prices
- vi. Cost
 - 1. Amount, bottom line, charge, disbursement, due, expenditure, loss, lost

Again I reached agreement with coders on which cues they would look for and again we were not seeking exhaustiveness in synonyms but cues that captured the concept in the project context. We ended up with a subset of documents for each of the cues, and now revisited these documents to see if there were specific insights that could be derived from examining across projects.

Due to the absence of nominal scale interview data, I was unable to utilize statistical techniques such as Cohen's kappa to calculate reliability across coders. To keep consistent with guidelines for coding and analyzing qualitative data we followed the approach of Miles and Huberman (1984). We reached a coding agreement of 75% (Coder 1) and 85% (Coder 2) during the first phase of coding for problem cues. This was deemed insufficient and we engaged in discussion prior to reviewing the data again. During the second phase coding agreement was increased to 95% for both coders. A considerable advantage I enjoyed in this process was that my coders and social entrepreneurs remained available for an extended period of time which enabled me to reach a final coding agreement of 100 percent after further discussion.

CODING EXAMPLE

One of the inductive insights is the emergence of *corrosive costs*. The following coding path will show how the insight emerged from the data.

Phase 1: Data categorization by document type (E.g. BR06132006: - Feeds Board Report of 13 June 2006).

Phase 2: Use of cues (COST / LOSS) to parse out a document subset

Note the presence of the coding cues in the “Event” and “Details” columns of the table below.

Table 3.3: Coding Phase 2

Case	Source	Event	Details
Feeds	BR06132006	2005 / 06 performance was poor	“Increase in overheads / debt cancellations and stock losses.”
	BR32006	Had to write off 356mt of maize valued at US\$61,944 as a stock loss	“Bulk of loss was during last year’s buying season weighbridge manipulation.”
	AFR03312011	Management significantly reduced stock holding	“This is by 40% in order to minimize stock losses.”
Medical	E0807082	Invertors / UPS to be purchased	“Loss of power and results on database require something to be sorted.”
	E09042006	Bad debt write off	“Write off bad debts, (what is the lowest acceptable profit that we can show?)”
Khaya	E07182008	Not always so good to go with very small vendors for social nature of business	“Was trying to claim back loss of bad brownies and spent a great deal of time working on this. May have been better to have just walked away.”
Widows & Orphans	BR02022008	Project disengagement after losses	“Members did not receive their dues as the project leader abused scheme funds and failed to observe chick distribution as above.”
	BR02022008	Project evaluation	“Feeds losing money due to unpaid credit for Stockfeeds for which chicks have already been sold.”

The following document (E09042006 above) depicts the use of coding cues “costs”, and then later on “revenue”, and “profit”; followed by the emergence of the themes “corrosive costs”

and “redirection”. This is an original document that has been anonymized in compliance with confidentiality requests. The unedited version is available for review by the thesis Jury members.

-----Original Message-----
From: [mailto:.....@.....com]
Sent: Monday, September 04, 2006 2:28 AM
To: Dr; C..... ..
Cc: Thompson, James
Subject: PRIORITIES

As agreed on Friday 1st September with Jimmy and, here are the list of priorities that we must schedule and put a time frame too.

1. Determine and set specific targets to
i) reduce costs
ii) increase revenue.

NB.
N..... to find out fees charged by dermatologist and ENT at GPH.
NJ, CM and DD to look at expenses and see where savings could be made.

2. Recruit Pharmacist

3. Recruit Accountant
i) Replace (...) and (...),
ii) Write off bad debts (what is the lowest acceptable profit that we can show?)
iii) Assess expenses
iv) investigate whether we can take payments made by patients against written off bad debt and place it in Maipelo

4. Recruit Nurse and move D.... to Finance

5. Investigate Staff debt on Med-e-mass and implement payment plans.

6. Drs
i) Update on MBA review
ii) Saturday schedule
iii) Vacation procedure
iv) Each Dr to receive their numbers and pay for 04/05 and 05/06 so they can see how there numbers have improved.

7. Staff
i) Update on MBA review
ii) New Job descriptions
iii) Matrix
iv) Incentive programme

8. Clinic Redesign (coding note: “Redirection” as consequence of excessive costs & need for increased revenue)

Please let me know if you have any queries or additions you wish to make

.....

Source: Email, Medical Project, September 04, 2006

Phase 3: Coding for Emergent Themes and Patterns

Note the addition of the column “Emergent Themes” in the table below. Each theme reflects an abstraction from the details of the event to a general management term i.e. “Inventory loss” or “Redirection”.

Table 3.4: Coding Phase 3

Case	Source	Event	Details	Emergent Themes
Feeds	BR06132006	2005/06 performance was poor	“Increase in overheads/debt cancellations and stock losses.”	Debt write-off / Inventory loss
	BR32006	Had to write off 356mt of maize valued at US\$61,944 as a stock loss	“Bulk of loss was during last year’s buying season weighbridge manipulation.”	Inventory loss
	AFR03312011	Management significantly reduced stock holding	“This is by 40% in order to minimize stock losses.”	Inventory loss
Medical	E0807082	Invertors / UPS to be purchased	“Loss of power and results on database require something to be sorted.”	Infrastructure uncertainty
	E1801081	Cost of new Internet Service provider and IT support too high	“P4000 a month + P96, 000 over 2 years + P700 an hour call out.”	Infrastructure costs (ICT) / IT skills scarcity
	DOC81508	Bad debt write off	“Accountant needs to write off ~1 million Pula in bad debts for the tax year.”	Debt write-off
Khaya	E07182008	Not always so good to go with very small vendors for social nature of business	“Was trying to claim back loss of bad brownies and spent a great deal of time working on this. May have been better to have just walked away.”	Logistics uncertainty
Widows & Orphans	BR02022008	Project evaluation	“Feeds losing money due to unpaid credit for Stockfeeds for which chicks have already been sold.”	Debt write-off
	BR02022008	Project termination / failure	“Members did not receive their dues as the project leader abused scheme funds and failed to observe chick distribution as above.”	Inventory loss / Mismanagement / Failure / Disengagement

The emergence of what we came to call a “corrosive cost” is clear from the examples above. I found that in each project there were costs (Barney, 1991) that were either unanticipated or whose impact on the projects performance were far greater and more corrosive than had been expected. These costs differed from project to project but every project encountered corrosive costs and the progress toward success was either totally or significantly constrained by the firm’s ability to conquer this cost challenge.

3.4.5 Phase 4: Cross-Experiment Comparison

As I moved to each new field research program I began to look for cross-experiment similarities, differences, and new findings. Once an anomaly or new finding emerged, I then returned to the data of the previous cases to in order to determine whether or not there was consistency or anomaly. In this manner I conducted multiple reviews of previous case data in order to find support for emergent sub-patterns. Through *iterative* search I began to build support for commonality of emergent patterns, insights, and propositions.

Extending the example of “corrosive costs”: In each of the field research programs I observed organizational recognition of unpredicted costs which became corrosive to business performance over time unless managed or mitigated for. An example of such a cost was the theft (or shrinkage) of raw materials in the Feeds and Widows & Orphans programs. Another example was that of Information Technology and programming costs in Botswana. After many assurances of IT cost estimates and power reliability the project was dogged time and time again with power outages, IT staff turnover and unreliable IT infrastructure. This resulted in significantly higher expenditure than budgeted for.

This systematic and iterative coding process led to several meta-level phenomena that spanned all the near-Knightian projects and facilitated the emergence of the inductive insights articulated in the analysis section. The author’s archival data contains multiple documents in

support of each insight. The table below offers a cross-section of data from each case in support of each emergent insight.

Table 3.5: Coding Phase 4

	Feeds	Medical	Khaya	Widows & Orphans
The Need to Reconcile Expectations and Tensions between the Dual Outcomes of Social Impact and Profit	Feeds business model is such that an efficient business and well priced product enables more customers to produce poultry & increasing nutrition. D02022008: Convinced to supporting Widows & Orphans “The chicks and Stockfeeds for the scheme were being supplied at cost.”	E12212005: “I was surprised to get this invoice.... We feel that our patient diagnoses/care is being jeopardized...”	D08252005: Sold KCC. Could meet SI but unable to secure sufficient profits / funding.	EX11012008a: Investor requirement of SI & Profit. Unable to configure venture to deliver both SI and Profit.
Uncertainty Reduction and Aspiration Cascades	first target market segment (rural villages) did not work out due to the cost of logistics in remote locations, Feeds redirected to customers closer to urban centers	E09292009: Hand over patient data to nonprofit “As soon as we have this and it is all systems go we will go ahead with getting the data to you.”	D08252005: Sold KCC. Entrepreneur running bakery training nonprofit organization in the US.	EX11012008b: Attempted higher profit, lower SI model. Failed to generate sufficient SI.
The Emergence of Corrosive Costs	BR32006: “Had to write off 356mt of maize valued at US\$61,944 as a stock loss.”	E09042006: “List of priorities. ... Reduce costs. ... Write off bad debts.”	E07182008: “Was trying to claim back loss of bad brownies and spent a great deal of time working on this.”	BR02022008: “Feeds losing money due to unpaid credit for Stockfeeds...chicks have already been sold.”
Deeply Entrenched, Inimical Interest in Sustaining the Status Quo, Despite Suffering	AFR03312011: “Management significantly reduced stock holding in order to minimize stock losses.”	D3010071: “Concerns raised from IRB and need to be addressed and resubmitted for review and appraisal.”	MEM102625: WSWP Interview. “...making too much money, massive fee”.	VID07032007: (Interview) “In order to re-launch the program we must have Aid.” D02022008: “...the project was left to the whims of the leader...losses.”
High Probability of Failure of Either / Both Commercial and Social Objectives	Company is successful on both dimensions.	E2603091: “D...lost confidence in system looking at other systems so Programmer went to see the system used at Cardiac clinic in Gaborone.”	W12182008: “Not sure if writing business plan sooner would have changed any of the dynamics.”	D02022008: “The transportation of birds to the market was sometimes delayed increasing costs... then indefinitely suspended this noble project”
Emergence of Unanticipated Consequence/s	MR012007: “since the commissioning of the Pelletiser, our sales have taken a whole new direction. It is our intention to ensure these sales...” D02022008: Widows & orphans sudden loss of income. Blamed Feeds.	Potential: Large-scale success would extend lifespan and vitality of HIV patients, whose labor output would be of economic benefit for the country.	112011: Founder growing a nonprofit bakery skills training organization in US.	D02022008: Widows & orphans sudden loss of income.

Now I turn to the field research experiments. For purposes of ease of description each will be described from beginning to end, regardless of starting point of the following project.

4. Field Studies

The Societal Wealth Enterprises studied in this dissertation were undertaken within the Wharton Societal Wealth Program (WSWP). WSWP was launched in 2001 as a field research program intended to examine the use of business models as a means to attend to social problems (Thompson & MacMillan, 2010).

Each of the four field experiments represent an attempt by a social entrepreneur to attend to a societal need through the use of a profit-seeking business model. As stated in the Research Design section, the cases represent conditions and experiences in three of the Sub-Saharan, African countries namely Botswana, South Africa and Zambia. Each country has similarities but also unique differences and challenges, which will be explored in more detail in the next section of the dissertation. For reasons of clarity, each of the four cases will receive its own section. They appear in the following order:

Feeds Program

Zambia, Africa (project initiated 2001)

Medical Program

Botswana, Africa (project initiated 2003)

Baked Goods Program

South Africa, Africa (project initiated 2005)

Widows and Orphans Program

Zambia, Africa (project initiated 2006)

4.1 Feeds Program

4.1.1 Description of the Situation (initiated 2001)

Country: Zambia, Southern Africa

Key Indicators (WEF, 2009)

Population (millions), 2008	12.2
GDP (US\$ billions), 2008	14.3
GDP per capita (US\$), 2008	1,150.50
GDP (PPP) as share (%) of world total, 2008	0.03



Project Abstract

The northwestern region of Zambia had been severely impacted by the fall in copper prices, and the subsequent closure of large numbers of mines during the 1980s and 1990s. As a consequence unemployment and malnutrition were at extremely high levels. The primary goal of the Feeds venture was to increase the quality and accessibility of protein in the form of livestock, poultry in particular, and to provide employment through a scalable production model for small-scale producers.

Country Background¹³

Zambia was formerly known as the territory of Northern Rhodesia and was administered by the [British] South Africa Company from 1891 until it was taken over by the United Kingdom in 1923. During the 1920s and 1930s, the mining of natural resources spurred development and encouraged immigration. The name of the country was changed to Zambia upon independence in 1964. During the 1980s and 1990s, declining copper prices, economic mismanagement and a prolonged drought set back the economy. Elections in 1991 brought an end to one-party rule, but the subsequent vote in 1996 saw blatant harassment of opposition parties. The election in 2001 was marked by administrative problems with three parties filing a legal petition challenging the election of ruling party candidate Levy Mwanawasa. However, the new president launched an anticorruption investigation in 2002 to probe high-level corruption during the previous administration. In 2006-07, this task force successfully prosecuted four cases, including a landmark civil case in the UK in which former President Chiluba and numerous others were found liable for more than USD \$41 million. Mwanawasa was reelected in 2006 in an election that was deemed free and fair. Upon his unexpected death in August 2008, he was succeeded by his Vice President, Rupiah Banda, who subsequently won a special presidential by-election in October 2008. Under President Banda, the Task Force on Corruption was abolished, President Chiluba and his wife were acquitted in their criminal cases, and the government declined to register the UK civil verdict.

4.1.2 Expectations

The project was to be executed in the northern region of Zambia, distant from the commercial center of the national capital and near the border with the Democratic Republic of the Congo. As such I expected there to be uncertainties of market, operations execution, and

¹³ Source: <https://www.cia.gov/library/publications/the-world-factbook/geos/za.html>

infrastructure. In keeping the expectations established earlier in this dissertation I expected that some, or all, of the following concepts and challenges would manifest during the study:

- *Social impact versus economic gain*
- *Resource accrual / lean resources*
- *Innovation / newness*
- *Uncertainty*
- *Redirection*
- *Possibility of project termination / failure*

Project Description: The Entrepreneur and the Opportunity

In late 2000 Ilona¹⁴ contemplated her next venture. The previous venture exit had been sudden and unexpected due to the sudden importation of large volumes of competitive product at heavily subsidized prices. She had been forced to sell her inventory at cost and exit the market.

She had also become deeply concerned by the high levels of unemployment and poor nutrition in the region to the north. As a former medium-size poultry and pork producer, she had observed that the existing suppliers of feed mixes produced what she believed to be low quality products, with a resultant lower yield in animal production output. Furthermore, she believed the incumbent producers of feeds to be oligopolistic, over-priced, and indifferent to the potential of two under-served market segments, namely subsistence farmers and small-scale commercial producers of poultry.

Having recently exited a venture, she was interested in exploring the feed mix industry with a view to entering the poultry industry. The concept was simple - to enter the industry with lower cost, higher quality feeds targeted at small-scale and subsistence producers of poultry. Were the venture successful in growing a sufficient customer base she

¹⁴ For privacy reasons, I keep the name of the entrepreneur anonymous.

would contribute to employment and nutrition. Ilona made it clear in early discussions that an attractive market opportunity might exist, were it done in a manner that produced self-sufficient customers. It was encouraging was that she had a history of starting small businesses with few resources and growing them into profitable enterprises without infusions of large amounts of capital.

There was no market data readily available. Based on discussions with vendors in the region and a large milling company, Ilona estimated that more than 90% of poultry producers in this region grew between 50 and 200 broiler chickens per 6-week cycle. By comparison, a large producer in a country like South Africa might produce on the order of 300,000 birds per 6-week cycle. In this particular region, however, the three largest poultry producers had an estimated output of 6,000 birds per cycle. The data on numbers of small-scale producers and potential feed sales volume did not exist. In order to get a sense of what the figure might be we established the number of chicks sold to the region by the national breeder. This figure was approximately 50,000 per week. Using a rough estimate of the average small-scale producer producing 20 broilers per week, the market was approximated at between 1,500 and 2,500 potential customers. What was not clear however, was how many actually purchased, or would purchase, commercially formulated feeds versus home-grown and mixed feeds. Ilona said would learn the approximate value of this assumption as early as possible by including consumer questionnaires to be handed out during a series of local educational seminars that she was going to launch for small-scale farmers in a number of rural locations.

In discussing the competitive landscape, we discovered through Ilona that the direct competition, comprised primarily of 3 large national and international incumbents, had a precedent of competitive intolerance. As an example, Ilona shared an experience she had in 1997 when, by paying cash for small-scale farming produce, she had affected the trading practices of long-standing incumbent merchants. In effect she had altered the structure of

payments in the market. In response, they managed to mobilize a government agency, which threatened Ilona with deportation due to an investor license technicality. Her learning from that experience was that in the event of success she would likely provoke a similar response. This meant that she would carefully consider how to protect the new venture from avaricious intentions. Another consideration was the scarcity of available capital for new ventures. The banking system was unstable, foreign exchange rates volatile, and interest rates at 60% per annum if available, with heavy requirements of collateral.

Accordingly, we challenged Ilona to spend her imagination (rather than capital) in order to gain market validation prior to a) the purchase of assets, and b) investment of our time or resources. Furthermore, we proposed the following:

- No product would be distributed or sold on credit terms. All sales would be cash-on-delivery. Aside from the mitigation of credit risk, this policy would support liquidity and force the product to withstand the market test on price and quality, rather than on ease of purchase. If the quality and price were right, the customer would pay cash.
- She should not approach any large customers of feeds such as the larger commercial farmers. In this way he might stay below the radar long enough to delay the inevitable competitive response, until such time as he was in a position to weather it.

The Launch

Local legal, political, and competitive considerations made it most appropriate for the entity to be created as an independent business unit within an established firm via an agreeable arrangement with management. She did this with a large, long-established company in the region, and one that would be able to provide the necessary space and security for the planned initiative. In the event of successful launch it would be spun-out as an independent

company. She started the company with six employees, six shovels, a concrete mixing floor, a storage shed, a telephone, and a small infusion of funds for working capital and the purchase of raw materials. All ingredients were mixed, bagged and loaded for dispatch by hand.

Ilona designed a sales strategy that proved to be particularly effective. She elected to focus first on poultry feeds, as this was the area of greatest demand and shortest animal production cycle. The market was broken down into areas around key towns and villages. She first identified a distributor in an area, and then advertised an education and sales seminar to be held close-by. Furthermore, she instructed her salesman to identify well-known small-scale producers in each area. These farmers were paid personal visits, something formerly unheard of, but exceptionally well received. They were invited to bring interested friends.

The education and sales seminars comprised of 3 presentations. The first was a presentation of basic poultry costings, expected returns, and simple accounting methods, delivered by Ilona. The second session was delivered by a veterinarian on disease prevention, identification and response. The third was delivered by a representative of one of the large chick hatcheries on the different types of bird, their costs, and respective life cycles.

At the end of each seminar participants were informed of the distributor location and that feed prices were available at a slightly lower cost than competitive products. Existing producers were encouraged to test the new feeds; non-producers were encouraged to begin an experimental poultry production trial.

The Feeds Program's first attempts at building a new customer base were in the rural areas. A number of farmers proved willing at first but quickly learned that the cost of transportation to purchase feeds and transport grown poultry to market was extremely high. Feeds learned the same with respect to the costs of distribution of feeds to their limited

number of distribution centers. Net profits turned out to be close to zero or negative for both parties. This caused the first major redirection for the firm. They began to focus on small-scale producers within a 10km radius of towns. This reduced the costs of transportation sufficiently so that rearing poultry was profitable.

Said Ilona: “We really wanted to serve the rural farmer but it was just too expensive. They learned the same. Our fuel prices are high and many of our customers out there had to rent vehicles to transport their product. We were forced to redirect our attention to customers closer to markets.”

Early Growth: Reaching a ‘Ceiling’

After 12 months Feeds was selling 140 tons of products per month to approximately 120 customers. A typical customer was the unemployed head of household who had attended one of the education seminars, growing between 50 and 200 broilers per month that. Ilona demonstrated during the seminars that should a family produce and sell 200 broilers per month they had the potential to earn approximately \$222.00 per month. When compared with minimum wage of \$1.00 per day this was not an unattractive proposition, particularly when viewed against an unemployment rate above 50 percent. Market feedback was increasingly positive and Ilona began salvaging junkyard equipment that could be re-built to assist with increasing production demand. The venture employed 16 workers.

At eighteen months the venture was selling 230 tons of products per month and had grown to 28 employees. The customer base had grown proportionately. Although Feeds was well established in the chosen niches, Ilona was concerned that they seemed unable to break through a ‘ceiling’ in sales of 300 tons per month, and that he may have underestimated the size of the market.

Ilona utilized the Attribute Mapping tool (McGrath & MacMillan, 2000) to design a basic customer interview, and key sales employees were dispatched to interview 30 customers across the sales region. The representatives returned with positive feedback on product performance, availability, and price relative to competitors. However, the most useful information received was in response to the question, ‘What do you currently tolerate about our product but would prefer to do without?’ The most surprising answer was that Feeds’ products had a shelf life of 6 weeks versus the 12 weeks of the competition. When probed as to why this was a problem when in fact distribution points were readily accessible, the real insight was gained. Customers in this market segment were primarily small-scale producers who did not have their own transport, and relied on third party transport, for which they paid dearly. For many this was a delivery scheduled once per 6-week cycle when they would purchase a batch of chicks and the calculated feed requirement. As a precaution against early spoiling of the product, due to it perhaps having been in the distribution depot for 1 to 2 weeks, they were purchasing a ‘safety net’ of longer life product from competing firms; even though the product yield was lower.

Correcting the problem required minor modifications in formulation at almost no extra cost. The sales person was dispatched the following week to thank those customers who had offered the information, and to inform all customers that the product shelf life had been extended. The result was an immediate increase in sales; three months later the sales ceiling was broken.

Product Optimization: Focus on Key Cost and Profit Drivers

In its first two years of operations the company gained control of approximately 25% of the local market. Although the young business was considered relatively successful, Ilona was concerned that the profit margin fluctuated between a low 3 and 5%. She had also received information that the rapid growth of Feeds had attracted the attention of the larger, more

established competitors. The “word on the street” was that the competition was considering a significant across-the-board price cut in an attempt to force Feeds out of the market.

In June of 2003, we initiated the next phase of our engagement with Feeds, a now successful small regional producer and distributor of animal feeds. This was to be our first investment aside from time. We had stated early on in the project that we would watch for evidence of beneficiary acceptance of the SWE before making any further investment. The purpose of the engagement was to identify cost reduction possibilities with which to improve Feeds’ ability to compete during a protracted price war, should it develop.

One of the key contributions I believed we could make was to use University of Pennsylvania School of Veterinary Medicine expertise and very smart University of Pennsylvania undergrads¹⁵ to build a simple, but effective, linear program to minimize the Cost of Goods Sold without compromising the quality of product. Early in the review it became evident that the opportunity to contribute was larger than I had recognized. The company had begun by offering 6 products. It was now offering 26. Due to the increase in recipe formulation complexity, management was reluctant to re-formulate as frequently as prices changed, and were using the same recipes for up to 4 weeks. With growth, what had begun as a few hours work and a call to a nutritional consultant for an acceptable fee, was now a task that was taking up almost 20% of Ilona’s time. She believed the business was unable to afford expensive multi-product formulation software applications and was not convinced she had the skills to use such tools.

¹⁵ My thanks go to the UPenn undergraduates who assisted in the research of the animal feed market, and in particular, to Christopher Wilfong for his outstanding contribution to the project as a whole, and more specifically, in the construction of the linear program and management tools.

I revised the original DDP and produced an update more representative of reality in that it incorporated data and information not previously available to us. The purpose of the exercise was to:

- i. Determine the operational requirements that would need to be met in order to achieve the goals of management (based on competitive expectations),
- ii. Run a sensitivity analysis, to determine the relative contributions to model variance of each of the assumptions I would be required to make,
- iii. Identify the future key cost and profit drivers of the business

Emergent Challenges

The first observed constraint was that of transportation and infrastructure. High fuel costs, poor road conditions, and a relative shortage of available transportation inhibited the number of customers that could be reached. Of particular interest here was the fact that sensitivity analysis in the DDP produced valuable insights that were specific to the local environment. First, due to revised theft and loss provisions, the shrinkage assumption migrated to the top of the sensitivity analysis chart as the greatest contributor to variance in profitability outcome. When product prices are inelastic; margins are in the order of 3 to 5%; Cost of Goods Sold in excess of 70%; and a provision for shrinkage between 5 and 10% (in extreme cases, 15 to 20%); the ability to effectively manage inventory losses had a profound effect on profitability.

Second, Feeds had extended credit terms to a number of distributors and was dismayed to see the implications of the decision. Receivables had sky-rocketed and bad debts had followed suit. As a result there were large associated costs, and a cash flow pinch.

Our recommendations were as follows: a) embark on an aggressive collections initiative to drastically reduce receivables; b) we would build and deploy a product

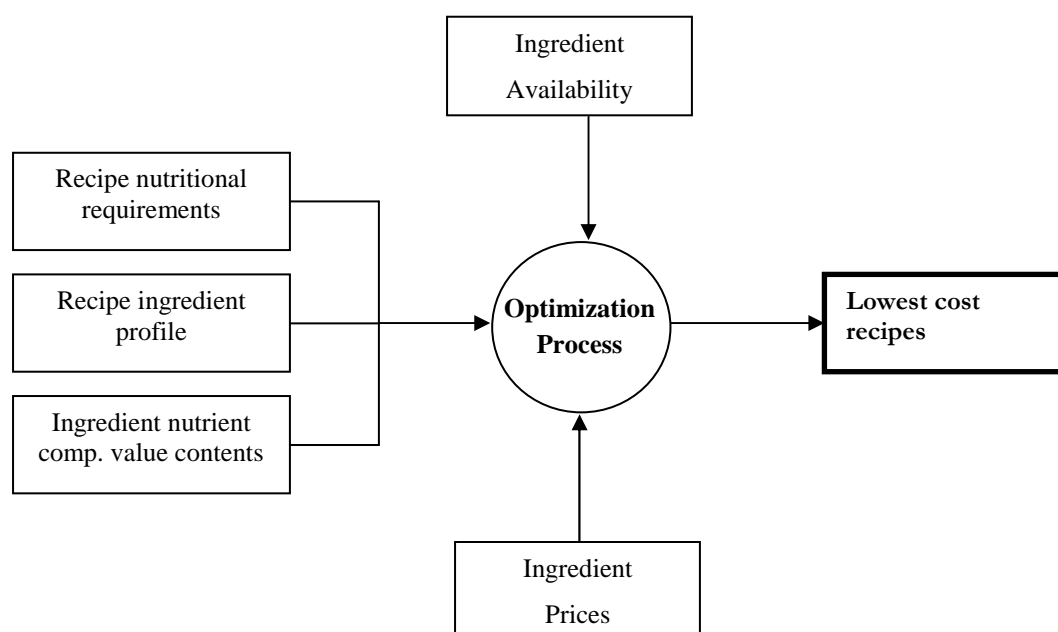
optimization program as soon as possible; and c) we would evaluate how we might construct a simple set of Excel-based management tools with which to manage inventory, plan production, and purchase raw materials.

Product Ingredient Optimizer

As a means of addressing the product formulation challenges I designed a linear program to optimize raw materials cost in collaboration with Ilona, the University of Pennsylvania's School of Veterinary Medicine¹⁶, and two of our talented undergraduate students. The program was delivered to Feeds in August 2003. The optimizer we developed is an MS Excel-based linear program, running in Visual Basic (VBA). Use of the program requires only limited knowledge of Excel, and no knowledge of VBA. The program was configured to simultaneously optimize up to 46 recipes, based on as many as 249 ingredients (50 ingredients are presently loaded into the system, and the user has the option to add up to 199 more). The user is able to update price, availability, and nutritional content information for each of the ingredients and feed formulas. The program provides summary outputs to aid in cost tracking, margin analysis, production management, materials ordering, and package labeling.

¹⁶ The author thanks the UPenn Vet School and specifically Dr. David Galligan and Dr. James Ferguson for their insight, assistance, and most of all, patience with our barely minimal knowledge of animal nutrition.

Figure 4.2: Lowest cost feed formulation



The following is a more detailed look at the scope of the software program:

Table 4.1: Scope of Software Program

INPUTS	PROCESS (performed by program)	OUTPUT
<p><u>Frequent Changes</u></p> <ul style="list-style-type: none"> • Adjust ingredient prices and availability • Change FX rate <p><u>Infrequent Changes</u></p> <ul style="list-style-type: none"> • Change commission % • Change spillage % • Change ingredient nutrient content • Add new ingredient • Change recipe nutritional requirements • Change recipe selling price 	<ul style="list-style-type: none"> • Setup constraints based on user inputs • Load constraints into the linear program • Run optimizer 	<ul style="list-style-type: none"> • Recipe nutritional information • Recipe ingredient breakdown • Cost information • Profit Margin information

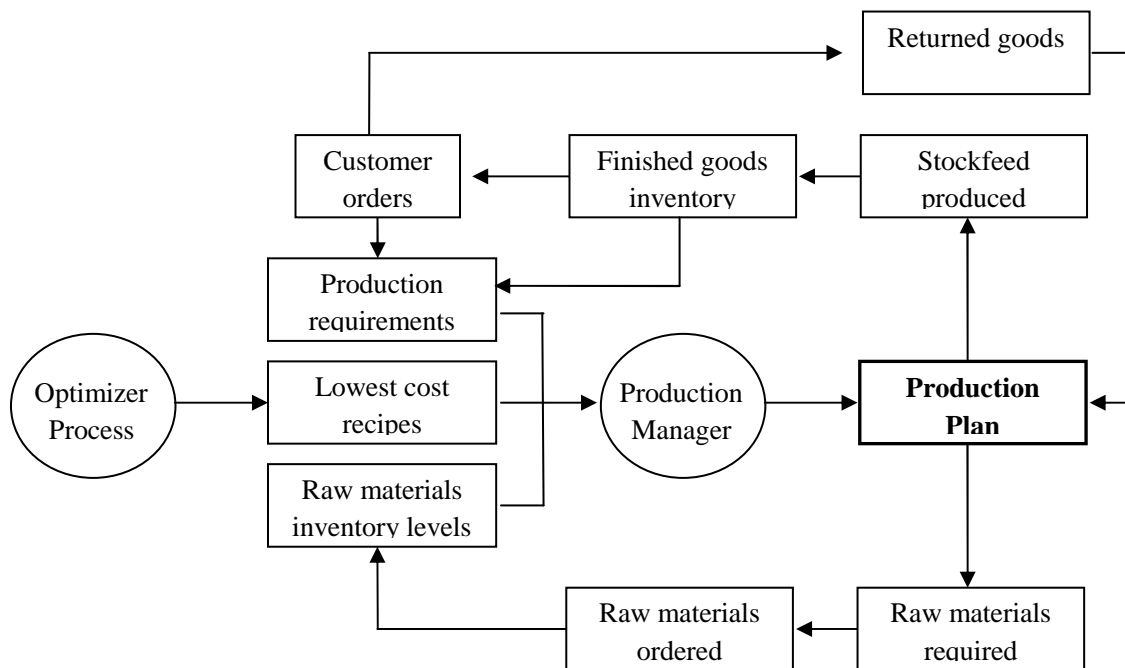
The feed production module was delivered in August 2003 and in use by the following month. At that time there were stronger market signals of an impending effort by the major competitors to displace Feeds by instituting a 20% reduction in selling prices. Based on simulated raw material cost savings, considerably reduced levels of receivables, new inventory control systems to be implemented, and the ability to accurately respond to a volatile Foreign Exchange rate, Ilona pre-empted the move by implementing an across-the-board 20% sales price reduction. Sales immediately climbed. Within a month all competitors had matched the new price levels. Feeds' operating profit margins held constant due to the effects of superior formulation; and then began to climb as lower levels of inventory, bad debts, shrinkage, and interest on bank loans were reflected in monthly financials.

Management Controls

The production management software was provided to Feeds as an update to the existing Excel program in February 2004. The software allows the user to translate the optimizer results into production plans quickly and effectively, while also integrating various inventory tracking functions. Production planner outputs include manufacturing summaries for use on the production floor, cost information, raw material requirements, and customized nutritional labels for packaging.

This addition to the product optimization tool was particularly difficult to deploy as there were a number of employees who were reluctant to accept such an accurate inventory management procedure. Ilona noted that it took approximately 4 weeks of continual struggle to reconcile raw material inventories with invoiced production, and the rolling weekly production plan. However, once implemented the system proved invaluable for loss control.

Figure 4.3: Production Management



The following is a more detailed look at the scope of the software program:

Table 4.2: Scope of Updated Software Program

INPUTS	PROCESS (performed by program)	OUTPUT
<ul style="list-style-type: none"> • Select desired production amount • Record receipt of raw materials • Record shipment of finished goods • Record receipt of returned goods <p><u>Independent Routine</u></p> <ul style="list-style-type: none"> • Update inventory levels to match stock check 	<ul style="list-style-type: none"> • Load formulas from the optimizer • Calculate production requirements • Copy relevant info to summary outputs • Adjust inventory to account for production • Adjust inventory for new receipts or shipments • Compare book levels to actual inventory 	<ul style="list-style-type: none"> • Raw material ordering requirements • Production summaries by feed type • Cost / margin data by recipe and for batch • Nutritional content labels • Inventory receipt/shipping records • Detailed spillage report

Project Highlights by Year

2004

The combined financial effects of these, and the tools above, were substantial. Profitability climbed to between 15 and 20%.

There were 3 major implications of the constraint-shifting innovations above:

- Significant management time was saved from formulating products. This allowed Ilona to spend more time elsewhere in the business.
- The management controls implemented reduced shrinkage to less than 1%. During my visit in late 2004 the Feeds administration chief claimed that shrinkage at some firms in the region was as high as 10%.
- Not only did Feeds business profitability improve, but so did their product quality. The new capability of instant product formulation based on ingredient availability and price enabled them to formulate the highest quality feed at lowest current constituent price. The chart below shows the feed conversion rate (FCR) - feed consumed converted to body mass - relative to the best three competitors in the market.

Table 4.3: Feed Intake per Chick

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Total	FCR	Relative performance
Feeds	0.19	0.58	0.60	0.44	0.80	0.90	3.52	0.89	100%
Comp 1	0.16	0.59	0.83	0.74	0.87	0.97	4.16	0.67	75%
Comp 2	0.17	0.54	0.99	0.91	0.85	0.95	4.41	0.68	76%
Comp 3	0.29	0.47	0.71	0.77	1.15	0.94	4.33	0.65	72%

Note the FCR is 24% superior to the next best competitor. What this meant was that to get to the equivalent size bird a customer needed to feed it 24% less feed by mass than the competitive product. The sales force communicated this information repeatedly to customers. Feeds continued to run trials such as this each year.

According to the 2004 year-end Board Report, the Feeds project had the following results and market impact both internal and external impacts.

Internal: The most recent financial year saw Feeds provide employment for 60 people and produce a Net Income of US\$500,000.00.

Automated formulation and record keeping functions had proven a significant timesaver for management – estimated at a minimum 25% of Ilona’s time.

Monthly income and cash flow streams have smoothed such that it is now considerably easier to access short-term finance for seasonal raw material purchases from banks.

External: Benefits beyond direct employment creation

When asked about Feeds greatest achievement Ilona’s response is quick and direct: “Our greatest achievement is unemployment reduction precipitated by hundreds of micro-businesses. We have 600 customers earning a better living, approximately one third of whom had never produced poultry, eggs or other livestock products prior to attending our seminars. Furthermore, between 10 and 15% of our clients have grown to production units of 1,000 to 4,000 broilers per month. They are employing family members, and others, to work with them; or in some cases, where they have jobs, to manage the units while they are away at work.”

The Feeds team began communicating to their customers the value of diversification in order to counter market demand fluctuation. A number of their customers have begun successfully producing broilers, layers and pork.

Product price levels for higher quality feeds remain reduced for the entire region of operation – farmers and producers in the area can now obtain feed at more than 20% lower price, whether it be from Ilona or from other producers.

New competition was entering the region due to the major increase in demand for feeds precipitated by the availability of lower cost feeds. This had a multiplier effect on food production.

Animal yield and health had increased to the degree that the rate of growth increase allowed an additional production cycle per annum through the same poultry facility, increasing customer Return on Assets (ROA).

2005 – 2006

This period marked a significant change for Feeds. The company was established and had been selling its largest volume products as “crushed” rather than in the more conventional “pellet” form. New, well-capitalized competitors had entered the market and were selling their products in pellet form. A key marketing message was that there was less wastage in the feeding process when pellets were used.

Ilona reports in the 09/2005 Feeds Board Report:

“We continue to be in mash, but the market seems to be developing a preference for pellets which our competitors are offering.”

By mid-2006 Feeds had missed their budget by 10% citing “...a change in customer preference opting to use pellets and crumbles as opposed to mash...and a poor supply of chicks in the local market.”

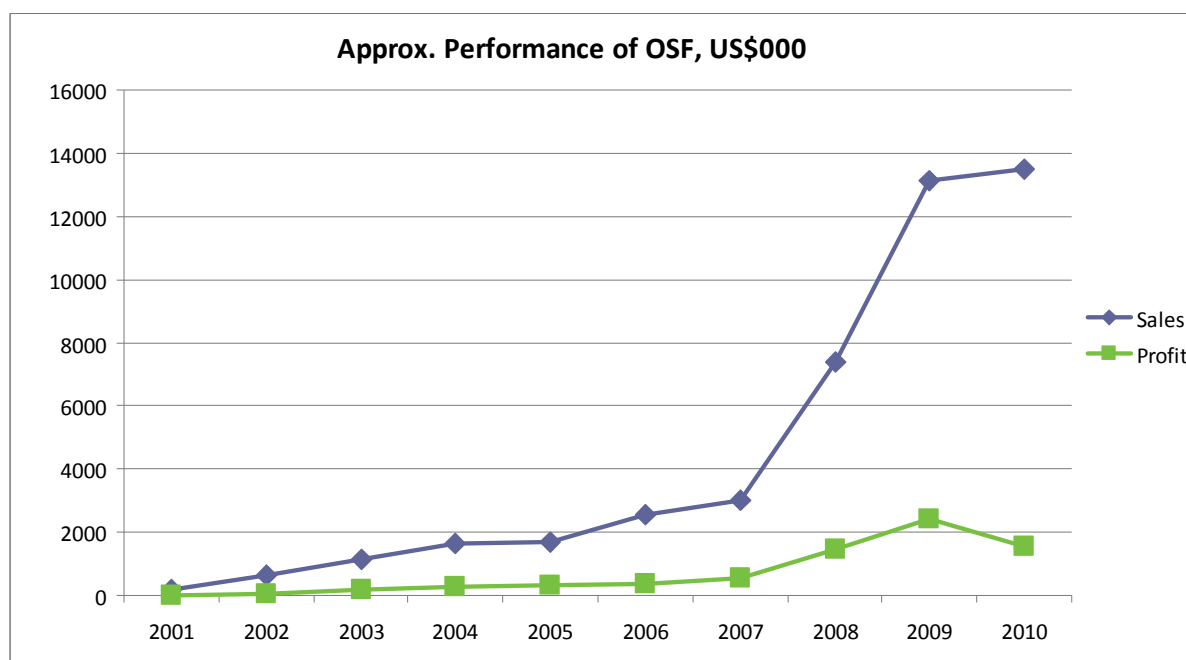
They were now considering their first large capital expense, a pelletizing plant imported from Switzerland. After an extensive decision-making process they elected to go ahead with the purchase and revised their sales projections. In order to meet their capital expenditure repayment they would have to increase sales and performance. This also meant serious consideration of selling to a new market, namely the Democratic Republic of the Congo, which had recently ceased a civil war. They placed the order and began to focus on

internal management challenges. Stock shrinkage had climbed again, as had their bad debt ratio with customers.

2007 - 2010

The pelletizing plant was installed and commissioned in late 2006, ultimately costing almost double to budgeted figure. However, once the plant was operational sales volumes began to climb substantially. The chart below shows available annual sales and profits from the years 2001 – 2010.

Figure 4.4: Sales to Profits 2001-2010



Impact to Date

Today Feeds produces in excess of 2,000 tons of feed per month and supplies more than 1,600 customers. This tonnage equates to more than 50,000,000 Daily Protein Servings (DPS) in a region formerly characterized by poor nutrition. Our societal metric goal of 1,000,000 DPS per annum has been far exceeded and Feeds has consistently exceeded its profitability targets. Of significant importance is the number of beneficiaries in the region that are not only eating better but are earning enough income to be self-sufficient. Feeds resides at the center of a small-scale producer ecosystem in the region. Each small-scale

farmer is earning income, which in turn is recycled through the economy generating an economic multiplier effect.

As of writing there are at least 5 competitors actively selling feeds in the region. This forces the entire industry to maintain competitiveness. In so doing they enable the participation of many beneficiaries. The structure of payoffs has been altered successfully and a virtuous cycle has been created.

Unanticipated effects / consequences

In response to shortfalls in government funding, the regional department of correctional services has begun to undertake its own initiatives in providing food for prisoners. Having successfully experimented with the production of broilers they have established larger production units, which are operated by prisoners. Surplus poultry is sold on local markets for funds to plant and grow vegetables. In turn, further surplus funds are being used to purchase egg-laying poultry. One prison has its own a broiler unit, vegetable crop and egg production facility catering for the nutritional needs of prisoners.

More recently a regional department of military service has adopted a similar program to that of the correctional services department. Also, a number of churches have developed community-based agricultural production programs in remote areas.

The National Poultry Association is considering the establishment of poultry processing plants for small-scale producers in region in which Feeds operates, as well as others. Ilona has been approached to serve as an advisor to members of the national committee and to take up a Board seat on the regional committee. The purpose of the initiative is to provide a means of processing and distribution to producers who are unable to sell their output locally.

Due to the significant increase in demand for poultry chicks in the Feeds area, national breeders are seeking to invest in new poultry breeding facilities. Their position is that they are no longer able to service the region from current facilities, and require decentralized production capacity to meet increasing levels of decentralized demand. This is an indication of increased levels of poultry consumption attracting production investment to support demand.

Perhaps most interestingly is that Ilona now serves part-time on the board of the National Poultry Association. In this capacity she plays a role in the management and regulation of the industry; an unintended and positive consequence of her success that none predicted.

Project Timeline

Table 4.4 below depicts the evolution of the project over time. I note here that it has taken the better part of a decade to scale from a start-up to a leading regional producer.

Table 4.4: Project Timeline

<u>Date</u>	<u>Phase</u>	<u>Description / Key Events</u>
Nov 2000	I The start	Entrepreneur recognizes opportunity and negotiates deal with corporate partner. Discovery Driven Plan (DDP)
... - Aug 2002	II Early growth – reaching a ‘ceiling’	Building a customer base: education seminars, distribution strategy, market research.
... - Aug 2003	III Product optimization - focus on what matters most	Linear program for product formulation.
... - Feb 2004	IV Production management – internal focus	Inventory management, production planning, raw materials procurement.
Jan – Apr 2006	V Profit optimization	Next step: build the analysis tool with which to determine the optimal product-volume mix.
2006 - ...	VI Capital Investment: Pelletizer Arrival of new competitors	Feeds made its first major capital investment by purchasing pelletizing equipment from Switzerland
2007	VII Market growth, business expansion (estimated 70% market share in local region). New competitor (Zambeef) Widows & Orphans scheme.	The results of the pelletizing equipment beat expectations / budgets. Corporate social responsibility program launched
2008	VIII Zambeef begins sales of feed Global market crash	Zambeef next stated goal is to dominate poultry which is Feeds biggest business. Widows & Orphans scheme fails. Significant loss incurred.
2009	IX Post financial crash	Market demand suppressed. Over capacity by feeds producers. Pressure on prices – margins fall.
2010	X Growth in sales	Declining profit margins. Management

4.1.3 Expectations and Learning

The table below summarizes the expectations and learning from the field study. The revised expectations are used to prepare for the next research project.

Table 4.5: Expectations and Learning (Feeds)

Expectations of Venture Challenges	Affirmation of Expectations	Anomalous to Expectations	New Findings	Revised Expectations
Social impact versus economic gain		Business model: nutrition <u>and</u> economic wealth creation. Challenge to for-profit construct as “social”	Social impact and economic gain not necessarily a trade-off.	Social impact versus / and economic gain Challenge to for-profit construct as “social”
Resource accrual / lean resources	Early operating capital scarce, CAPEX, feed formulation tech	Once profitable and growing raised capital relatively easily	Human resource skills deficiency / scarcity (structural)	Resource requirements, scarcity of skills
Innovation / newness	New market segment, new distribution model			Innovation / newness
Near-Knightian Uncertainty	Infrastructure (power, transportation, legal), competitive response			Near-Knightian Uncertainty
Redirection	From rural farmers as target market to urban / peri-urban			Redirection
Possibility of project termination / failure	First market segment unsuccessful	Venture success		Possibility of project termination / failure / success
Cost uncertainty	Fuel, power, transportation, raw materials		Unanticipated and high costs (theft, logistics)	
Structure of payoff change	Production profits from large incumbents to many small-scale producers			Structure of payoff change: Yes

4.2 Medical Program

4.2.1 Description of the Situation (initiated 2003)

Country: Botswana, Africa

Key Indicators (WEF, 2009)

Population (millions), 2008	1.9
GDP (US\$ billions), 2008	13.5
GDP per capita (US\$), 2008	7,554.20
GDP (PPP) as share (%) of world total	n/a



Project Abstract

Botswana's impressive economic gains were threatened by one of the world's highest known rates of HIV/AIDS. The goals of the program were: (1) to increase healthcare capacity in lean-resource settings through the use of IT that enables nurses and other front line healthcare employees to increase their participation in the diagnosis and care of patients with critical diseases, and (2) To increase the life span and employment vitality of HIV/AIDS infected workers.

Country Background¹⁷

Botswana was formerly the British protectorate of Bechuanaland, and adopted its new name upon independence in 1966. Four decades of uninterrupted civilian leadership, progressive social policies, and significant capital investment have created one of the most dynamic economies in Africa. Mineral extraction, principally diamond mining, but increasingly other gems and metals dominates economic activity. Tourism is a growing sector due to the country's progressive conservation practices and extensive nature preserves. Botswana has one of the world's highest known rates of HIV/AIDS infection. However, it also one of Africa's most progressive and comprehensive programs for dealing with the disease.

4.2.2 Expectations

The project was to be executed in Gaborone, the capital.

Uncertainty: Given that Botswana is one of the most stable countries on the continent, has one of the highest international credit ratings, and one of the lowest crime rates, I expected lower uncertainty with regard to infrastructure-related costs.

Considering the learning from the Feeds study, I expected that some, or all, of the following concepts and challenges would manifest during the study:

- *Social impact versus economic gain:* Patient health / extended lifespan versus costs of treatment.
- *Resource accrual / lean resources:* During the start-up phase of the project we managed to raise research funds from one of our alumnae. These funds were sufficient to allow us to begin exploring the medical space and to partner with a software provider. I was aware that the government had committed substantial sums of money toward HIV/AIDS and believed that should we make a compelling enough

¹⁷ <https://www.cia.gov/library/publications/the-world-factbook/geos/bc.html>

case we might be in a position to partner with the appropriate organizations on the ground.

- *Innovation / newness:* New technology, new proposed business model, uncertain revenue model.
- *Redirection:* The project would take place in healthcare, using a new technology, so I expected the venture team would need to learn and possibly redirect as the project unfolded.
- *Possibility of project termination / failure*
- *Costs:* Our experience with Feeds caused us to expect unexpected costs and as such we were vigilant from the start. Given the experience of our software partner I believed that major costs would be accounted for.

Project Description: The Entrepreneur and the Opportunity

In early 2003 a software start-up visited our Center at Wharton. The founder was developing a novel artificial intelligence software application. In discussions it emerged that he and his team were considering developing an application that used computational algorithms and large databases to make highly sophisticated diagnoses and treatment protocol decisions in pediatric psychology. I had recently been made aware of the large-scale impact of HIV/AIDS on the workforce in Zambia. I was also aware that the Medical School of the University of Pennsylvania had begun working in Botswana to assist with the disease. The technology entrepreneur suggested to us that he could see no reason why their software technology could not be applied to HIV/AIDS diagnosis and treatment protocols.

I committed to meeting with him again in a few months when he had a demonstration ready. If it was of interest, and could be applied to the WSWP, I would consider meeting with him and with the Medical School to discuss possibilities.

After almost nine months of challenges the software company decided that they were unable to deliver what they had thought they might and we parted ways. However, we were now interested in the social problem as early research had indicated the enormous negative effects on sub-Saharan African work forces.

First Redirection

In mid-2004 one of our research students discovered a small company in the US called TherapyEdge (TE) that had developed an electronic medical record (EMR) specifically for HIV/AIDS patients on treatment. At that time treatment protocols were complicated to prescribe and difficult to manage. This company was also operating in Southern Africa already. We made contact and they flew to Penn to visit.

The Launch

After discussions with the company and physicians it emerged that the problem in HIV treatment was not the costs of drugs. The real constraint was the distribution of the drugs – in other words getting the right combination of drugs to the right patient at the right time. This was not a trivial task, and many patients develop other clinical conditions, often driving line of therapy changes. The bottleneck was qualified physicians. Botswana had only 28 and needed many more. The idea was that we could use TE software to enable nurses to assist with treatment decisions of naïve and stable HIV patients, thereby reducing the massive workload on doctors and helping to increase the number of patients who needed treatment receive it.

The following is an abstract from the project plan:

A desktop computerized decision support system for nurse administered ARV prescription:
Implementation and Evaluation

The recent change in Botswana regulations that allow nurses to administer ARV prescriptions presents an opportunity for a computerized decision support system (CDSS) to be implemented, with the goal of limiting adverse drug effects (ADE). Evaluation of the success of the CDSS is its ability to achieve patient outcomes similar to doctor-administered ARV prescriptions.

Implementation of the CDSS will be in large part based on the findings of the JAMA article from March 9, 2005, "Effects of Computerized Decision Support Systems on Practitioner Performance and Patient Outcomes: A Systematic Review." The article identified two characteristics of CDSS that increased success, and both characteristics will be incorporated into our implementation. First, the CDSS should automatically prompt the user for data input, rather than rely on the user initiating data entry. Second, the creating the CDSS and conducting trials for the CDSS should not be separate functions and should be carried out by the same group.

The CDSS will also generate self-evaluation reports, to allow for continual improvement. The system will record the CDSS-generated recommendation, record the actual nurse's prescription, and allow an expert doctor to view patient data and input what he or she would have prescribed. Reviewers can then compare the nurses' prescriptions to the doctor's prescriptions, and the system will either prove effective, or attempt to correct itself by adjusting rules based on the doctors' input. The system can adjust the rules either inferring new rules from doctor input, or by manually adjusting the current rules.

This work will show that CDSS can be effective with thoughtful implementation and an evaluation process that can correct for nurse-doctor discrepancies.

In February of 2005 the software company launched a pilot program at a private clinic in Gaborone, Botswana. I had identified the clinic through our Medical School and assisted in making the introduction to TE. There was early excitement at the site about the project and our Medical School suggested that should the pilot work they would assist us by making an introduction to the Botswana Ministry of Health, which was responsible for the national anti-retroviral program, the largest of its kind in the world.

However, in order to develop treatment protocol algorithms, patient data needed to be entered into the system, laboratories integrated, clinic staff trained, nurses trained, and

ultimately physicians too. The coordinator on the ground, Nikki, began working with TE to build the electronic database.

Implementation

I assisted in identifying a suitable candidate to work with TE on the ground. Nikki was hired to be the coordinator of the program, and would also manage all EMR-related activities at the site. She trained the relevant staff and embarked upon a highly impressive data entry program. According to one of the physicians, Andrew:

“Nikki’s team enters data faster and more accurately than the equivalent clerks in the US!”

The project started well but soon problems began to arise. At first they were minor, and attributed to expected implementation problems but gradually grew to be more disruptive. In the meantime we had attracted the attention of physicians involved in the national anti-retroviral (ARV) program. They insisted we meet with a very senior member of the Ministry of Health, which we did as a member of the envisaged Botswana Alliance to Develop ARV Capacity (BADAC), which was presented as follows:

What is BADAC?

BADAC is the Botswana Alliance to Develop ARV Capacity. A public/private initiative, BADAC is a partnership of medical and technological partners including the Wharton Business School of the University of Pennsylvania, Advanced Biological Laboratories, the Botswana Ministry of Health, the Princess Marina Hospital, the University of Pennsylvania Medical School and a number of local Botswana partners.

The purpose of the BADAC is to develop alternative staff capabilities in the prescription of ARV therapy and patient monitoring.

How does BADAC work?

The BADAC works in clinics across Botswana to develop the alternative staff capabilities. At each clinic, the BADAC uses a software application called TherapyEdge to manage patient files and to assist in the prescription and patient monitoring process. The BADAC works in each clinic to install the software application, integrate existing patient data with the new application, train the clinic staff and then support the staff with both the software and the prescription process.

What is the BADAC software application?

The BADAC software application is called TherapyEdge. TherapyEdge is a specific patient record, monitoring and reporting system with key built in decision support tools for HIV treatment and therapy. The patented system combines longitudinal medical records with advanced decision support for the whole HIV care and support team.

Currently, the TherapyEdge software is used in over 42 clinical sites in 33 countries. It is used by NGOs as their primary longitudinal patient record, by government organizations to track program indicators and expenditures, and by clinicians to improve the quality of care.

Why is BADAC important to Botswana?

Botswana is at the forefront of the fight against HIV/AIDS in that it has one of Africa's most progressive and comprehensive programs for dealing with the disease. In response to the overwhelming number of infections, the critical shortage of physicians and the national treatment goal of 150,000 persons receiving treatment by 2008, the Ministry of Health has recently taken a decision to develop alternative staff capabilities in the provision of ARV therapy and the monitoring of patients.

The BADAC's software application is a critical partner to reach this national treatment goal because TherapyEdge's built in decision support tools allows other health professionals to safely prescribe anti-retroviral therapy according to the Botswanan governments mandated lines of treatment.

The Minister was impressed by the concept and wrote BADAC a formal letter of support. This was an important vote of confidence.

Implementation Struggles

By late 2005, Nikki's team had input 1,200 patients in the system but TE was unable to deliver the reports that Dr. D needed. Furthermore Botswana began to experience uncharacteristic power outages due to fluctuating supply from South Africa. The clinic began to suffer erratic and sudden system shutdowns. A few of the key clinicians in the practice did not share Dr. D's desire to do research. They were incented to see high volumes of patients and felt their income was at risk were they to take the time to enter data into the system.

Says Nikki: "The lead clinician began to covertly sabotage the project by taking every opportunity possible highlight a complaint in the practice."

Revenue Model Redirection

The initial hypothesized revenue model was to sell anonymized clinical data to pharmaceutical companies wishing to conduct research. However, that was determined infeasible when they stated the clinic dataset was too small to be of much use.

In mid April 2005, TE was unexpectedly bought by another company. The company immediately visited the site and changed the programmers. To make it more challenging the programmers were French and there quickly emerged a communication dilemma. They seemed to struggle to communicate clearly with Dr. D and Nikki about what was needed to be developed.

Patient Response

In the meantime patients began to respond favorably to seeing their charts on screen. Dr. D. called saying: “I can now actually show them what happens to their body weight and other health markers on screen if they stop taking their medicines.”

Unexpected Termination

On February 22, 2006, the new owners of TE responded to accusations of non-performance at the clinic by breaking the pricing contract. The new annual price was to be in excess of \$50,000 per annum. Dr. D could not afford such fees. On Feb, 28 the relationship was terminated and arrangements made for withdrawal of the EMR from the site.

Escalation of Commitment

In response to this sudden loss of patient service Dr. D asked us if we could assist. One of our OPIM faculty believed that with the right support the system could be built. At that time there was a programmer from Google on an extended vacation in Gaborone. He met with the OPIM faculty member and Dr. D and agreed to spend his spare time designing a new system. He delivered on his promise and we assisted Nikki in finding more programmers to build out the system. One of our donors was thrilled with the idea and agreed to support it.

By 2008 the program had developed to include 16,000 patients but we were never able to identify a viable revenue model. Furthermore, Nikki and her team were growing increasingly frustrated with the resistance from two key physicians on site.

As the programming team was ready to launch a robust version of the software, the financial market collapse took place and our funding sources dried up. We were left with a dilemma: terminate the project or find another way. Dr. D did not want to lose the patient

treatment capability or the research data. We did not want to harm the beneficiaries at the core of the initiative.

We decided to disengage from the project BUT transfer all data to a nonprofit vendor who set up at the clinic. This was the first time I experienced a reduction of aspirations and transfer to another organization type.

4.2.3 Expectations and Learning

The table below summarizes the expectations and learning from the field study. The revised expectations are used to prepare for the next research project.

Table 4.6: Expectations and Learning (Medical)

Expectations of Venture Challenges	Affirmation of Expectations	Anomalous to Expectations	New Findings	Revised Expectations
Social impact versus economic gain		Business model: nutrition <u>and</u> economic wealth creation. Challenge to for-profit construct as “social”		Social impact versus / and economic gain Challenge to for-profit construct as “social”
Resource accrual / lean resources	Early operating capital scarce, CAPEX, funding		Human resource skills deficiency / scarcity (structural)	Resource requirements, scarcity of skills
Innovation / newness	New market segment, new service delivery model			Innovation / newness
Near-Knightian Uncertainty	Infrastructure (power, ICT)			Near-Knightian Uncertainty
Redirection	Data revenue sources, patient markets			Redirection
Possibility of project termination / failure	First market segment unsuccessful			Possibility of project termination / failure / success
Cost uncertainty	Power, ICT, skills			Cost uncertainty
Structure of payoff change	Public sector patient management to private sector healthcare delivery			Structure of payoff change: Yes
			Socio-political challenges: public sector interests vs. private healthcare interests	Socio-politics
			Disengagement to nonprofit	Disengagement / aspiration reduction

4.3 Baked Goods Program

4.3.1 Description of the Situation (initiated 2004)

Country: South Africa, Africa

Key Indicators (WEF, 2009)

Population (millions), 2008	48.8
GDP (US\$ billions), 2008	277.2
GDP per capita (US\$), 2008	5,693.30
GDP (PPP) as share (%) of world total, 2008	0.72



Project Abstract

Many of South Africa's township residents suffer from acutely high levels of unemployment.

Many women and mothers are uneducated and have never been employed. The founder of the business built the company to provide employment to underprivileged women as well as provide them with workplace training and transferable skills in order that they become employable and self-sufficient.

4.3.2 Expectations

The project was to be executed in one of South Africa's poorest informal settlements. I expected to find conditions of *deep* resource scarcity in the township

Uncertainties: New production environment; unskilled labor; export market development.

Considering the learning from the Feeds and Healthcare projects, I expected that some, or all, of the following concepts and challenges would manifest during the study:

- *Social impact versus economic gain*
- *Resource accrual / lean resources*
- *Innovation / newness*
- *Redirection*
- *Possibility of project termination / failure*
- *Costs*
- *Socio-political*
- *Possible disengagement*

The Entrepreneur and the Opportunity

The Khayelitsha Cookie Company (KCC) was built as a social enterprise in 2004 in a subdivision of the township called Mfuleni, approximately 30 miles outside the center of Cape Town. The aim of KCC was to produce gourmet cookies and brownies for sale across South Africa, while providing employment for women. Most of the women were previously deemed unemployable or were surviving on government benefits. Those benefits were usually in the amount of R150 or the equivalent of \$22.00 per month¹⁸. KCC aimed to fulfill the company slogan ‘Creating opportunity one bite at a time’ by using social change to develop a sustainable and wealth-creating future for its employees.

¹⁸ www.oanda.com FX 1USD equals ZAR 6.71 as of June 9, 2011

“Huge numbers of uneducated, unmarried mothers in South Africa eke out a precarious living, barely able to feed their children. The Cookie Project was conceived in 2004 to train such women to operate bakeries in distressed area, making high-quality cookies (using natural ingredients) for health-conscious consumers throughout the country.”¹⁹

KCC founder Alicia²⁰ left her investment banking job at BlackRock as a Vice President in New York City to take a position as an International Consultant for the Freeplay Foundation, which is now called Lifeline Energy. The goal of Lifeline Energy is “to improve the quality of the lives of vulnerable populations through dependable and environmentally friendly technologies. We are committed to providing renewable energy alternatives to those most in need.”²¹ The product, which was most widely distributed as a tool for humanitarian aid (as classified by UNICEF), was called the Lifeline Radio. The Lifeline Radio is:

Powered by either wind-up human energy or solar power, the Lifeline is designed specifically to connect people in remote communities to the information network.

Farmers need market prices and weather reports, parents need information on baby care and remote clinic schedules, and those who are most marginalised, including child-headed households and refugees, seek connections. Constructed to operate in the harshest of conditions and climates, the Lifeline radio is rugged, colourful, easy to use and carry, receives excellent AM, FM, and two shortwave frequencies and plays for many hours non-stop. It is available to aid and donor organisations for developmental and humanitarian initiatives and is not sold commercially. To ensure radios – and the vital information and education they deliver – reach the people who need them most, we partner with non-governmental organisations, government ministries, international organisations and broadcasters.”²²

While working with Lifeline, Alicia began spending a great deal of time in the townships distributing radios to those deemed as “vulnerable populations”. This included those who were unemployed, HIV positive and orphans and other vulnerable children (OVC’s).

¹⁹ Thompson, James D & MacMillan Ian C. (2010, September). Making Social Ventures Work. *Harvard Business Review* p.7

²⁰ For privacy reasons, I will refer to the entrepreneur by her first name only.

²¹ www.lifelineenergy.org

²² http://www.lifelineenergy.org/lifeline_radio.html

The more Alicia began to see the poverty in the townships and the more she began to distribute the radios the more she saw a flaw in model of this type of aid distribution.

Although the batteries in the radio were rechargeable and had a solar panel there was a degradation factor on them. After approximately four years the batteries would lose their ability to charge, making them essentially useless. Alicia had tried to convince the Executive Director of the Freeplay Foundation to include some type of job training component to the radio distributions so at least one recipient would be able to replace the batteries and train others how to do so (of course spare batteries would have to be left with, for example, a village chief). The reason to leave batteries is that the majority of the populations they served were located in very remote villages and it was highly unlikely the Foundation would return to see them again after four years or was appropriately tracking the recipients of the radio. The Executive Director did not agree with this approach. She preferred to have the ability, or need, to return to donors in four year's time and appeal for more funding for more radios.

When Alicia began to think about these flaws she remembered meeting someone who seemed to have developed a different way of creating income. Alicia's first radio distribution was to Kidzpositive,²³ a Cape Town-based NGO dedicated to improving the health of HIV-positive children in Southern Africa and is providing anti-retroviral treatment and AIDS education for children. Dr. Paul Roux who heads this program noticed that the mothers were not consistently bringing their children to the clinic for their ARV's even though the medication was free. He could not understand this. When he questioned the women he found that they often lacked the income to pay for transport to the clinic. They also complained that they were bored when they had to sit and wait for their children to wait and receive their ARV medications.

²³ http://lifelineenergy.org/project_southafrica_Kidzpositive.html

He was faced with a challenge. His patient's mothers had little to no income and too much time on their hands. He solved this problem by coming up with an income-generating scheme. He came up with a solution that was relatively low cost, easy to teach and could be portable – meaning that the woman could bring this work home with them after their children's treatment was finished. He named the income-generating solution the Kidz Positive Beadwork Project. Through the project, the women were taught how to make customized beadwork that today is sold all over the world. Eighty percent of the profits go back to the women and provide income for over 100 AIDS affected women and their families.

With this program as a model, Alicia decided to launch an enterprise that would create income, generate employment, and reduce dependence on aid. She decided that a baking company would fit the bill.

The Seeds of Baking Company

Alicia was not a skilled baker by any stretch of the imagination but realized baking could be a model that could follow in Dr. Roux's footsteps. It met several of his criteria: 1) Relatively low cost to start a "baking project", 2) Did not require literacy or high level of skills on the part of the participants, 3) Could be taught with a fair amount of ease, and 4) Was a skill that was replicable and transferable across cultures and languages. Based on these four premises Alicia decided that baking would be backbone of the social enterprise. She would help "create opportunity one bite at a time".²⁴

Alicia first began by testing the concept at her home and employing one "tea-lady" from the Freeplay Foundation to come and bake with her. They made very simple recipes, i.e. chocolate chip cookies based on the popular Nestle Toll House Cookie recipe, which Alicia obtained on-line. The tea lady spoke little English, primarily Xhosa and Afrikaans but

²⁴ Cape Argus, December 20, 2004

they were still able to communicate. Alicia sold the cookies for a few rand to her friends. They liked the cookies and the basic premise of the idea. Her former classmates from her MBA program at UCT Graduate School of Business provided her with positive feedback on the basic premise of the idea. I was included in this “initial focus group”. This further encouraged her and she began to plan for a more “formalized version” of this idea at night after working her job at the Freeplay Foundation during the day.

Alicia worked with an industrial designer at the Freeplay Foundation whose sister was a top pastry chef working for one of South Africa’s top hotels, The Arabella Sheraton. Her name was Alma Oosthuizen.²⁵ Alicia approached her to see if she would be interested in teaching her the basics of baking and work with her. Alma, who is Afrikaans, was slightly hesitant at working in the townships but felt somewhat of a sense of obligation to help “better her country” and agreed to help Alicia develop a few simple recipes for her yet unnamed company.

Alicia and her tea lady, Princess, continued to bake at her house at night. At this time, her contract with Freeplay was coming to an end and she knew it was time to take her plan a step further. She began her plan to look for a facility to bake from. As she learned from her time at Groote Schuur and Kidzpositive it was expensive for the women to come from the townships to the center of Cape Town. Armed with that information Alicia decided to look for a facility to bake from in the township.

Searching for a Facility

Alicia had read about a program sponsored by a large local flour company (South Africa’s equivalent of Pillsbury) called Snowflake. They also had a non-profit program called Learn to Earn in which they taught unemployed women baking skills with the aim of teaching them to become entrepreneurs. This 8-week course was being run from a center

²⁵ Food Review, January 2005, Vol. 32, Number 1

called Nobantu in the township of Mfuleni. The township is adjacent to Cape Town's largest township Khayelitsha, which is home to between 500,000 to 1 million people who live in abject poverty.

Alicia read an article about the program and realized that there would soon be a space available with the equipment she needed in a few weeks. The Executive Director of Snowflake's Learn to Earn Program was very hesitant to meet with the Alicia and essentially sent her on a wild goose chase. It took Alicia 47 phone calls to track down the Community Leader who ran the center, Margaret Gwegwe. Gwegwe's "job" was to create programs for the center, which included job creation schemes. The only existing job creation program at the time, however, was a very small project in which the women made a few greeting cards which were sold for a few Rand here and there. The "programs" Gwegwe had running where not effective and not generating any real income for the women.

Alicia approached Margaret and told her about her idea. She came with her recipes and discussed her idea to start a cookie company that would provide employment to the many women she saw just sitting around large cafeteria style tables. The women, mostly elderly, were literally sitting doing nothing. Alicia had several obstacles to overcome to convince Margaret to allow her to come and bake at the center and employ several of the women. The first was that she had been "burned" by the promises of Snowflake. They had promised to turn the women into budding entrepreneurs, which did not happen. What did happen is that the women became even more marginalized after the failed Snowflake attempt. Gwegwe was also very resistant to the idea of having a foreigner (or Alicia believes anyone else for that matter) come and use her facility.

Alicia noticed that the electricity was off and offered to pay to turn the electricity on in exchange for the use of one of the ovens at the community center and the use of the ovens. Gwegwe agreed. It was a bit of a "work-around" but it got Alicia's foot in the door.

The Pilot

Alicia came with her raw materials: chocolate, flour, sugar, eggs and butter. Snowflake's Learn to Earn program had left a few things behind such as mixing bowls, measuring cups and spoons and a few hand mixers so the Founder, without having to spend a great deal of capital, had enough to start her venture. The original recipe was a very simple one based off the classic Nestle Toll House recipe. Why did she choose that one? Very simple: 1) She didn't know how to bake and 2) she needed a product that did not exist in South Africa. Most of the chocolate chip cookies that were on the shelves were hard as a rock. The cookie she was going to make was a soft, chewy, American style. Something very different to the existing cookies on the market.

Thandeka Tofu was Alicia's first employee. She spoke mostly Afrikaans and Xhosa, but knew enough English for the two to be able to communicate. Potential employees had been so beaten down by their adverse circumstances they had to be persuaded that they could, in fact, become employable and would not be exploited. At this early point Alicia had hired a cartoonist from the local Cape Technikon to design the labels (in a Ben & Jerry style, colorful cartoon characters reflecting the local dress of the township women who baked for her). Once the first batch of cookies were made, Alicia headed out to the upscale, gourmet retail food and coffee shops in the center of Cape Town. This first attempt was a total failure.

Alicia realized that the name of the cookie company was associated with poverty and poor quality. Although the packaging was very good and the quality exceptional, it was unlikely she would be able to gain access to the traditional retail markets.

Expanding the Distribution Chain

Realizing that she still had a tourist's mind-set (although she had been living in Cape Town for four years at this point), she began to think about outlets where tourists would be located. They would most likely be socially conscious and the social nature of the cookie

company would “grab” them. She soon started reaching out to individual managers at Protea Hotels. She chose this hotel chain because she stayed for a long period of time at a Protea hotel during her MBA program. This was a very successful strategy that yielded positive results in a fairly short period of time. One hotel began ordering, soon others followed suit and within six months Protea Hotels had placed the cookie company on their intranet ordering system. Meaning all hotels had access to the cookies via their internal website.

Following suit of appealing to tourists she appealed to one of South Africa’s largest domestic airlines – Kulula. Between the airlines and the hotels the business began to churn very nicely. Alicia still wanted a retail outlet so there would be some exposure to the general, South African public to her brand. She began to approach local coffee shops and finally struck a chord with a socially conscious general manager of a chain called Seattle Coffee²⁶(no association to the US brand Seattle Coffee). After several meetings with the owner, Sandy Neil, and a trip to the Nobantu Center, she was convinced of the quality of the cookies and vision behind the company. The Founder now had another distribution chain.

Although the orders were streaming in the women still remained “weary” of Alicia. She had to prove to them that she was not exploiting them for labor. They were being well paid. There is no established minimum wage in South Africa, only suggested guidelines and they were being paid 30% above those guidelines. Alicia led by example, working closely with the women. “I was not an ‘armchair’ boss. This means that I did not ever ask them to do anything that I did not do. We had a cleaning schedule. If they had to clean the ovens, I cleaned the ovens and the same went for scrubbing the floors and the toilets. I worked alongside the women and this established an enormous amount of trust.” She also took them on field trips to show them the fruits of their labor. For example, she took them to the Protea

²⁶ Word Document, “Proposal_Seattle Coffee” July 1, 2004

Hotel²⁷ in Stellenbosch so they could see their cookies as they were used for coffee and tea service. She relates a breakthrough moment when she knew she had the “buy-in” of the women: “One day I put a label on a package crooked. One of my workers, Mmhatabo, who barely spoke English, noticed my mistake. She said to me (in very, very broken English) Alee cia – this is garbage. She dumped the entire box of 3,000 cookies out and made me recheck every single label. It was one of the happiest moments, to date, I have had at work.”

Beyond Baking

The outcomes and deliverables had become very clear: To make a high quality product that could compete with the best of the local goods. The cookies quickly became the cookie of all the Protea Hotels and were served on Johannesburg to Cape Town Kulula flights²⁸ (which were as much business as the cookie company could handle). At the same time, while the business was expanding Alicia was working to train the women in not only baking but provide them with lifestyle training. This entailed teaching them how to read a basic invoice, teaching them what the invoice was comprised of (i.e., what is a gross profit, what is a net profit and what makes the difference, i.e., cost of goods sold). She taught them (those who spoke Afrikaans and basic English) how to reorder supplies, how to keep stock of our goods, opened bank accounts for them at the Post Office, taught them how to write a check and how to manage their basic household finances. In addition basic customer service skills were taught.

Within her small company she taught them basic entrepreneurial skills. For instance, each woman was responsible for her own recipe. For example, they made Florentines for a coffee shop called Seattle Coffee and one of the workers took charge of figuring out ways to improve upon the taste, look, quality and packaging of that recipe. She owned that recipe.

²⁷ Word Document_Protea Hotels Pricelist_Wholesale February 2, 2005

²⁸ Word Document_Kulula Brief, May 30, 2005

Growing Pains

In the first year she was able to gross approximately \$30,000 USD. The company was now up to between 8 and 11 employees (depending on the amount of orders). However, the company's growth had begun to spiral out of control. It was growing too quickly.²⁹ Hand mixers broke, the ovens were getting slow due to overuse, and the founder was having a very hard time managing her cash flow. The hotels were notoriously slow to pay, leaving Alicia with approximately 30 days of expenses to float while waiting for the hotels to pay. She was running out of cash to float the supplies needed, salaries to be paid, and the business continued to expand.

She applied to the Department of Trade and Industry (DTI) program for fast-track financing called Red Door for financing.³⁰ This program was marketed as a "one-stop shop for new and existing businesses looking for help and advice, from the most basic to the most sophisticated." One of their aims is to help the entrepreneur find access to finance. Although Alicia was hiring all black women and that was the mission of her company, she found that as a white, non-South African, she was ineligible for any type of assistance.

As the orders continued to mount and the pressure continued to rise she began to look at potential investors in the United States. Through a contact she was introduced to a wealthy South African living in the U.S., Phillip Kirsch, the owner of a successful chain of bakeries found in New York City, called Hot and Crusty.

Alicia arranged for a due diligence meeting with Kirsch when he was in South Africa on a holiday vacation. Even though the company was doing very well in its infancy (after many emails and discussions) Kirsch made the decision not to invest within the company. He wanted only to invest in non-profits and did not believe a social enterprise could work.

²⁹ Quickbooks June 30, 2005

³⁰ Word Document_KCC Business Plan 2004_Red Door January 30, 2005

Alicia continued to find doors to capital slamming. Her American friends and former banking colleagues felt the idea was still “too risky”. Many of them had never been to South Africa and had only read the bad press on the crime and poverty and had never seen the potential of the country.

In addition to the mounting financial and work pressures, Alicia was receiving external pressure from members of the township. It turns out there were challenges to becoming successful. A community elder feared that they were making too much money (she had no concept of what the word net profit meant and only saw the hundreds of cases of cookies going out the door and didn’t understand all the costs involved to run the business). The community elders got together and demanded a MASSIVE fee to use the building. Alicia had to educate them about the proposed activity’s broader economic spillovers and the resulting expansion of the influencers’ economic base.

Realizing no financial help was coming her way, she began to look at potential partners. One natural partner was the Eziko Cooking School in Langa.³¹ This school also provided unemployed people with technical, career-orientated skills in cooking and catering. Eziko offered courses in basic cooking and catering, basic watering, part-time baking and catering, micro business, aftercare and placement services. However, they did not have a product that was developed for the retail/hospitality market. Alicia approached the director of the school for a potential partnership. Initially he seemed to like the idea of joining forces with Alicia (he had less business experience than she did) but was unreliable, did not show up for meetings and was unwilling to discuss any kind of time frame for a merger of the two businesses.

³¹ <http://www.ezikorestaurant.com/index.html>

The Difficult Decision to Sell the Company

At this point with no access to financing Alicia made the very difficult decision that she was going to have to fold the company because she could not handle the influx of orders, manage the cash flow, and continue the work flow, or sell the company to South Africans who would either have the cash or access to financing. After several months she found buyers for the company who had access to cash, the ability to quickly and seamlessly transition into a new, fully equipped facility and agreed to hire all the existing staff for a 2-year period. Alicia, with no other options, agreed to the sale of the company.³²

Alicia made the sale and faced the difficult task of telling the women to whom she had become very attached to at this point. The women were very upset, but after explaining that their jobs were secure they were comfortable and accepting of Alicia's decision. The transition to a new facility, located 30 minutes outside the township and closer to the center of Cape Town (which made for a much smoother distribution process), took only one day, occurred on a weekend and ensured no distribution in either the order process or delivery process to the customers.

After a three-month transition process in which Alicia worked with the new owners of the company, Alicia returned to the U.S. She remained in touch with the owners of the company and advised them on all aspects of the business.

While back in the US, Alicia began to think about ways to replicate the model either again in South Africa, on a larger, more successful scale. She still felt there was a way to restart the company and make it "bigger and better" and create a great impact in terms of number of jobs created.

³² Sales Contract August 08, 20005

Khaya Cookie makes its US Debut

At this point, Alicia contacted us at the Wharton Societal Wealth Program. She believed that there was room in the US market for a socially conscious cookie coming from South Africa and provided these facts to us:

1. America's fascination with world flavours, along with its growing ethnic population, is helping to fuel the dramatic growth of gourmet/premium foods and beverages." As the United States increasingly becomes and recognizes itself as a multicultural society, ethnic foods are soaring in popularity and acceptance.
2. Entry into the gourmet cookie market comes at a prosperous time. Sales of gourmet and specialty foods are expected to rise nearly 63%, to \$96 billion over the next five years, according to new research in the category from Packaged Facts. Sales in the gourmet, specialty and premium food and beverage category grew to \$59 billion in 2007, a nearly 11% increase over 2006.
3. Current research³³ predicts the entire category will grow at a compound annual rate of 10.2% between 2007 and 2012. That's higher than a predication made in a previous report two years ago, predicting a compound growth rate of 9.7% between 2005 and 2009.
4. An important trend is that potential cookie buyers are willing to spend higher amounts on imported cookies because of their "international flair."³⁴

Her initial idea was to partner with the new owners of the cookie company and enter into a distribution agreement with them. She would act as the marketing agent for the company and gain access to U.S. distribution. This would create additional orders on a large-scale basis hence creating more jobs.

³³ 2006 Mintel Report Cookies

³⁴ Khaya Cookie Company Business Plan February 14, 2008

She returned to South Africa to negotiate terms of a Distribution Agreement³⁵ with the new owners. After three months of trying to negotiate terms she was unsuccessful. The company was also unable to meet the health and safety requirements needed for export orders. She returned to us for further guidance at the WSWP. We too believed in the potential for the business model to deliver investment grade profitability. We believed this could be achieved by once again, partnering with an existing facility. However, this time Alicia would partner with a facility that met the requirements for export ready products and could be FDA approved and Hazard Analysis & Critical Control Points (HACCP)³⁶ approved.

Alicia returned once again to South Africa and with the help of her food scientist, Andrea Hegewish, began to look for like minded, socially conscious bakers. Alicia and Andrea had an initial list of five bakeries in the Western Cape. After conducting due diligence on five of the factories (two were not interested in producing for the company and two did not have the appropriate health certifications) they came to the decision to partner with Tony's.³⁷

Tony's Bakery was a fully FDA and HAACP certified bakery located in Kyalami very close to the center of Cape Town. They were a certified producer for Woolworths (South Africa's equivalent to Whole Foods) and had a good reputation. They were very interested in job creation and beginning a partnership with us. They also agreed to conduct all the research and development free of charge. At this point Khaya was producing only the original South African products, which included ginger snaps, chocolate chip cookies and brownies, and had not yet created an additional product line for the U.S.

³⁵ Word Document_Distribution Agreement Khaya Cookies 181006 (clean) v.4 Part 1_Sales Agreements Essential Documents October 19, 2006

³⁶ HACCP is a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product.

³⁷ Email November 26, 2006

“The short nine months of partnering with Tony’s was a sheer disaster”, said Alicia. The initial trials for product development were held up by two months due to scheduling conflicts with the production of existing products. Tony, the owner of Tony’s, who was initially very interested in the partnership, was suddenly unavailable and Alicia was left to deal with junior level staff. At the same time Alicia began to have some successes on the US front in terms of marketing and sales. She was able to secure an order from Yahoo from their corporate sales department. The order was given to Tony’s with ample lead time (12 weeks). Tony went on vacation and forgot to order the labels for the brownies³⁸. The only printer in town who was open and had a machine that could print labels quickly enough had only one “die” (precut) label. The problem was that the label was the size of a wine bottle and the brownies were the size of one half the wine label. Instead of losing the order Alicia made the brownies a bit longer to fill the bags which had to match the size of the longer label. The labels were absolutely too big, but nonetheless by being flexible and innovative the company was able to fulfill the order. After gaining more traction and more customers in the US, Alicia realized that Tony would ultimately make an unsuitable and unreliable business partner.

Andrea and Alicia returned to the drawing board. In May of 2007 they found and instantly partnered with Andre Haasbroek the CEO of Nibbly Bits. The factory was located in Wellington in an area called the Drakenstein. The area, much like Khayelitsha (and the first home of the cookie company), is surrounded by a township called Mbekweni and has an almost 70% unemployment rate. Andre was also highly committed to job creation.

³⁸ Email December 22, 2006

In 2008 he instituted the Lifestyles Development program with the purpose to provide employees with training on issues outside the realm of baking, such as basic financial literacy, family planning, domestic counseling and assistance with housing.³⁹

The products sold in the South African market were created specifically for that market and therefore an entirely new range of products needed to be created for the U.S. market. The new range was designed to appeal to U.S. consumer's desire for products containing nutraceuticals combined with an "old fashioned" taste. It took approximately 6-8 months to develop a range of five products.⁴⁰

The original graphics used by the company contained cartoon-like characters based off Ben & Jerry's style. The characters were dressed in South African style. This would not "work" in the U.S. so a complete re-haul had to be done in the U.S. to reflect the target market's taste, which was the group called LOHAS: Lifestyle of Health and Sustainability. A high-end design firm was hired to help redesign the packaging called ITO partners (at half their normal fee). It took approximately 8 months to redesign the packaging.

Adapting to the US Market

With the first cookie company the marketing strategy was to sell to hotels, airlines and make customized cookies for companies and weddings/special events. They had no on-line presence. In the U.S., the market was much different and the company sold to mass-market stores like Whole Foods, several on-line catalogues such as Zingermans, and had a fully functional e-commerce system. This was an entirely new direction for Alicia.

I worked with the Founder to help her frame the business. Alicia had set a minimum profit of \$60,000 per annum. (If she had decided to be a non-profit, she would couch this number as "surplus cushion.") If the industry net profit margin for premium producers is

³⁹ Email December 03, 2008

⁴⁰ Word Document May 01, 2007

approximately 15%, then her cookie business must generate $\$60,000/15\% = \$400,000$ in annual sales. If retailers will pay about \$2.00 per box (eventually selling them for \$4.00 per box), then the required annual number of boxes of cookie sales is $\$400,000/\$2.00 = 200,000$ boxes per year. This equates to 16,667 boxes per month. That was the equivalent of one shipping container per month and the Founder felt, based on initial indications from customers that number to be a reasonable sales target.

The next step in her venture was to obtain funding for the operations. One of our largest donors, William Holekamp, expressed an interest in the cookie company, now named the Khaya Cookie Company. After compiling a full set of financials⁴¹ Alicia invited myself and William “Bill” to the factory in Wellington to meet the team and conduct due diligence. Pleased with the financial model, the skill of the team and the scale and efficiency of the factory Bill gave the Khaya Cookie Company \$338,000 in exchange for 42% of Khaya.⁴² This represented a pre-investment valuation of \$466,672 and post investment valuation of \$804,672.

Once Alicia received funding from Bill she began to look for a distribution center (DC) in the United States. Her first distribution center was located in South Carolina. She had a contact who referred her to a DC that was willing to take on the work without the limitations of minimum order quantities and was located in an economically disadvantaged region (EDR)⁴³. Although the business relationship worked well, the DC was located approximately three hours inland from the Port of Charleston. Khaya incurred additional trucking fees due to this. At this point Alicia had orders originating from the e-commerce platform that needed to be filled and needed to make a quick decision in regards to choosing a DC. With the South Carolina distribution center in place, she simultaneously began to look

⁴¹ Excel Document_The Khaya Cookie Company Co. Financial Model_v23(version 1) (7) Holekamp Final Financials January 1, 2008

⁴² Email March 03, 2008

⁴³ Word Document_APB Distribution_Platinum Packaging v4 June 9, 2009

for a more convenient location. This would be one located closer to a shipping port.

Through a Wharton contact, she met a woman whose brother, Andy Kronfeld, owned a string of DC's. One of these happened to be located in Philadelphia. Alicia approached the owners of Platinum Packaging and asked if they would be willing to operate as a DC for the Khaya Cookie Company. Operated by two young entrepreneurs, they were keen to secure the business. In less than two months Alicia was able to have the DC FDA-approved and customized. The two owners installed customized shelving and made the room climate controlled, creating the perfect storage environment for the cookies⁴⁴

Alicia hired a well-known food consultant: a former executive employee of John Scharffenberger of Scharffenberger's chocolates introduced Alicia to the National Sales Director of Peet's Chocolate. They instantly liked two of the company's products, the cranberry and rooibos shortbread and the orange and rooibos shortbread. They also have a strong commitment to corporate social responsibility and instantly placed an order for one full container. At the same time the DC became fully operational she found her first "home" for the first container of Khaya Cookies (approximately 20,000 boxes). That was the company's first big "break" into the US market.

Alicia's quest to gain entry into Whole Foods had been occurring in the background of all her other operational duties such as managing the shipping and logistics for the company, handling the existing orders for the ecommerce clients and their newest client Peets. Alicia was finding that time to shelf at major chains in the US was a much timelier venture than in South Africa. In South Africa the relationships seemed easier for Alicia to make. It was a smaller pool of players and easier to connect with the key players at hotels, airlines and grocery chains. To gain entry into 36 Whole Foods stores in the Northeast region took 2 years and 8 months. During this time Alicia tried to access Whole Foods via their

⁴⁴ Email October 13, 2008

national and regional managers, sending letters, samples and making phone calls. She went to one of her local Whole Foods in Devon, PA and appealed to the Regional Manager, Charlene Nolan⁴⁵. She told the story how the Distribution Center in Philadelphia, PA was hiring local people so the Khaya Cookies were technically a “local” product. That is what finally got Khaya Cookies into Whole Foods.

At first she was able to sell directly to several Whole Foods in the region. Once the product began to sell well in several of the local Pennsylvania Whole Foods store the product gained the attention of the category manager and was “admitted” to the Northeast territory. At this point it was mandated that the company use a Distributor.

An initial decision had been made not to use Distributors but an exception had to be made for entry into Whole Foods. Typical distributor margins are 25%. Alicia negotiated for Avenue Gourmet to receive only a 5% margin.

Ultimately, the decision not to use Distributors was a mistake. This made mass access to the market difficult. The initial decision was made not to use Distributors for two reasons 1.) Distributor’s typically charge a 25% markup for their services and often require “free-fills”, promotional materials/in addition to their salary and commission, and 2.) An initial trial run with a Distributor failed during a six month test period. The goal was to sell 2,000 cases per month. Six brokers would have a goal of 333 cases per month, 3 varieties, or 111 stores selling 1 case per variety per month or 55 stores selling 2 cases per variety per month. Using direct and distributor sales in each region, after six months only 5 cases had been sold.

Now that the company was in Whole Foods, Alicia realized how much fuel it took to “fire” the Whole Foods machine. She quickly learned that getting the product on the shelf was actually the easy part. At this point in time the company was not meeting its sales goals

⁴⁵ Email March 3, 2009

and generating revenue. It was not unable to hire additional staff, most importantly, sales staff. This was crucial to the success of the business. Alicia spent a great deal of time trying to grow all the aspects of the business on her own. For example, she spent a significant amount of her time doing demos at Whole Foods, she met with student leaders to try and engage universities as another potential distribution channel, wrote many of her own marketing pieces to save money, traveled to small, high-end gourmet stores to make introductions and sales calls. She was stretched too thin and the company began a downwards spiral. Alicia terminated operations and disengaged in later 2009.

4.3.3 Expectations and Learning

The table below summarizes the expectations and learning from the field study. The revised expectations are used to prepare for the next research project.

Table 4.7: Expectations and Learning (Baked Goods)

Expectations of Venture Challenges	Affirmation of Expectations	Anomalous to Expectations	New Findings	Revised Expectations
Social impact versus economic gain	Social impact and economic gain not necessarily a trade-off.	Challenge to for-profit construct as “social”		Social impact versus / and economic gain
Resource accrual / lean resources	Early operating capital scarce, CAPEX, growth capital			Resource requirements, scarcity of skills
Innovation / newness	New market segment, new distribution model			Innovation / newness
Near-Knightian Uncertainty	Logistics			Near-Knightian Uncertainty
Redirection	From rural farmers as target market to urban / peri-urban			Redirection
Possibility of project termination / failure	First market segment unsuccessful			Possibility of project termination / failure / success
Cost uncertainty	New market access			Cost uncertainty
Structure of payoff change	Production profits from large incumbents to formerly unskilled workers			Structure of payoff change: Yes
Socio-politics	Township status and perceptions of fairness			Socio-politics
Disengagement / aspiration reduction			Disengagement. Entrepreneur moved to nonprofit organization	Disengagement / aspiration reduction

4.4 Widows and Orphans Program

4.4.1 Description of the Situation (initiated 2006)

Country: Zambia, Southern Africa

Key Indicators (WEF, 2009)

Population (millions), 2008	12.2
GDP (US\$ billions), 2008	14.3
GDP per capita (US\$), 2008	1,150.50
GDP (PPP) as share (%) of world total, 2008	0.03



Project Abstract

In August 2006 there was a mining disaster at a Chinese Chambishi mine due to an explosion. The explosion claimed hundreds of lives and left more than 300 widows in its wake. It also left more than 2,500 direct dependants orphaned and / or vulnerable. An entrepreneur proposed a partial solution to the dilemma in the form of a poultry-growing scheme designed to accommodate the widows as small-scale producers in order to earn an income.

4.4.2 Expectations

Given Feeds had operated in the market for some time I expected to have lower uncertainty with regards costs related to the production of poultry. I did however have deep concern about transportation infrastructure challenges as the beneficiaries were widely dispersed. Considering the learning from Feeds and the other projects, I expected that some, or all, of the following concepts and challenges would manifest during the study:

- *Social impact versus economic gain*
- *Resource accrual / lean resources*
- *Innovation / newness*
- *Redirection*
- *Possibility of project termination / failure*
- *Costs*
- *Socio-political*
- *Possible disengagement*
- *Aspiration reduction*

The Entrepreneur and the Opportunity

In late 2006, Mr. K., an entrepreneur, arranged to meet with one of the senior management members of the holding group that owned Feeds. He proposed that as a corporate social responsibility (CSR) initiative, Feeds could supply raw materials to the Chambishi district and he would run an independent venture that would manage a scheme where many of the widows would be trained to participate. He reasoned that the project was “just an extension” of the activities Feeds was already doing with their many small-scale producers. He envisioned many of the widows raising poultry as a means to earn income, but the model would be slightly different from the regular Feeds business model.

He would manage the training of the widows as well as the logistics of all raw materials and sales of grown poultry. The widows, as beneficiaries, would apply for admission to the program, receive training if accepted, and then raise chicks to full-grown chickens whereupon Mr. K. would sell them at market. After deducting the cost of the chicks, feed and drugs supplied he would pay the widows the surplus, thereby enabling them to earn an income without having to invest in the production process up front. The logic extended further to a strategy for sustainability, dubbed the “modus operandi” in the business plan, and outlined below:

Modus operandi

- 1st batch 200 chickens per member - no member contribution
- 2nd batch 200 chickens per member - 25% member contribution towards cost
- 3rd batch 200 chickens per member - 50% member contribution on costs
- 4th batch 200 chickens per member - 75% member contribution on costs
- 5th batch 200 chickens per member - 100% contribution from the member
- 6th batch the member can buy all the chicks and feed from their own resources and owns the chickens and will get full return. By the 6th batch the member would also have acquired enough expertise on chicken rearing and attained self sufficiency in a sustainable manner.

The idea was to provide the first batch of chickens, as well as all feed inputs, as a loan, which would be recovered over time as the grower accumulated profits. The entrepreneur calculated that after six 8-week cycles of poultry production the widows would have fully paid for the following production cycle and would no longer need assistance with working capital. This would enable the program to take on additional widows without having to raise more working capital.

Mr. K. and his team put pressure on Ilona, the Feeds entrepreneur, to begin the project and to support it fully. She agreed on the conditions that Feeds was paid on a monthly basis and that once the Chambishi staff was fully trained her staff would no longer be required to assist with the day-to-day management of the initiative. She also agreed to supply the required chick and feed inputs at Feeds cost prices with no profit margins added.

A Resounding Start

The program started very well with a number of widows being well trained by sales staff of Feeds. Early indications were that the program was a resounding success. As it grew, local politicians began to praise the CSR efforts of the Group that owned Feeds. Within 6 months the President of Zambia's wife visited Chambishi and proclaimed the virtues of the model as a positive contribution to both the widows and the region. Mr. K. was thrilled and began earnest discussion about scaling the project to other areas of Zambia struggling with unemployment, hardship and poverty.

While Mr. K. was feeling very positive about the future of the program, Ilona began to express some concern that the project was not being run as well as it should have been. The Chambishi project was beginning to pay late and their credit limit was moving beyond her sanctioned amount. She was clearly concerned that all was not as it seemed. However, she said multiple times that the senior members of the Group believed the project to be an important signal to both the market and politicians and was under pressure to maintain the project.

Sudden Collapse

Three months later Ilona discovered gross accounting irregularities and terminated the project. There was deep distress in Chambishi and even senior community leaders approached Feeds to continue to support the program. The senior members of the Group

were concerned that there would be a negative response to the closure. In fact Feeds was accused of shutting down the project when in fact it they were an in-kind supporter of it. Mr. K. claimed that there were severe challenges that he and his team had been unable to overcome, such as having just a single pick-up truck for transport.

Within 2 years Feeds incurred a net loss of \$210,000. Ilona had been right, but now was being cast as the one who had shut down the program, the sudden disengagement of which was hurting the very beneficiaries it had been designed to assist. When I met with Mr. K. again he was interested in re-launching the venture should there be more funding available to do so, and was certain that it would be different the second time around.

In the meantime, we had asked the Feeds Company administrators to report on what they believed had gone wrong. Below are some of the reasons given by Feeds administrators as to why the project failed:

- Monitoring controls to ensure that members progress on the weaning scheme as above broke down,
- Hence members never managed to be fully self sufficient,
- Members did not receive their dues as the project leader absconded with scheme funds and failed to observe chick distribution as above,
- This led to Feeds losing money due to unpaid credit for stock feeds for which chicks have already been sold,
- The accounting records were not kept well and the resources committed by the feed company were not fully accounted for,
- The transportation of birds to the market was sometimes delayed, increasing costs, and
- Non-payment of members' dues demoralized them.

Enter the Philanthropist

In early 2008 I accompanied one of the WSWP supporters to research sites in Africa. He was particularly interested being able to see for himself and then communicate his experience to his family back home.

After learning of the Widows and Orphans program and reviewing some video of the program I had taken on a field research trip to Feeds in 2007⁴⁶, he made a surprising proposal. He wanted to invest up to \$3 million in the project in two investment tranches. However, he attached 4 conditions:

- At least 1,000 widows employed when the project had scaled over 5 to 7 years,
- A for-profit entrepreneur capable of managing such an endeavor was to be located,
- He did not want to run the risk of ever being accused of taking advantage of the widows,
- He wanted the WSWP to utilize its project assessment tools prior to him writing a large check and was prepared to pay \$15,000 to do cover the costs of a preliminary feasibility study.

Dual-Objective DDP

I prepared a project overview in which the business model options were specified and then built two dual-objective DDPs for the project each representative of a different business model. The first DDP was an attempt at replicating Chambishi but with a superior management infrastructure. The second DDP considered another business model in which the scale of production was larger, housed within a village, and operated by fewer women.

⁴⁶ I visited the Chambishi project in late 2007 and conducted semi-formal interviews with the entrepreneur, administrative staff, and 9 of the widows. A number of them permitted me to use my video camera to document chicken-rearing practices, discussions of income effects and social impact, and local context.

I determined from discussions with contacts in Zambia that we would not be able to attract an entrepreneur capable of building and operating an operation of the scale envisaged for a salary of less than \$150,000 - \$200,000 per year. This sounded high until I learned that the cost of living in Zambia for well-educated and capable executives or entrepreneurs is as high as South Africa, and fuel is more expensive, as are certain homes in sought-after areas. In addition, many executives send their children to school outside the country and pay private school fees in stronger currencies.

Our first objective therefore, was at least \$200,000/annum profit for the venture. The philanthropist had specified a minimum employment impact of at least 1,000 widows at project maturity (estimated 5 years from start up). I built both dual objective DDPs and reached an uncomfortable conclusion. If I built the model to accommodate 1,000 widows, the management, operations and transportation infrastructure required was exorbitant. The project was likely to lose in excess of \$500,000 per annum.

If I built the model to make the required profits using larger production facilities based in villages we would employ only 150 widows, thereby failing to meet our funder's societal metric. Reluctantly I responded that given the location of the intended recipients, and the desire to have them remain in their homes, I was unable to configure a business model whereby both goals were met.

On October 17, 2008 I received an email from the donor: "Jim, how goes it? Anything new with the chicken evaluation? Are you going to be in Philadelphia on the 23rd or 24th? Give a call when you have a chance." It was clear that he was still committed to the concept and was prepared to visit to discuss it further. I proposed to speak with our contacts in Zambia once again and take one last look at the DDPs before making a final decision.

After revisiting the models a number of times and running each of them by Feeds management it was apparent that the conditions on the ground had not changed and that my models were representative of their understanding of the market and costs at that time. No matter what I tried the constraints were such that I could not make the project “work”. An adequate solution space would not emerge.

With deep regret, we turned down the funding. The first response from our donor was to question whether I had looked at all the alternatives. I ultimately responded to our donor as follows: “We agreed on both metrics before we started, did we not?” He responded “yes.” I then said that we could not make the project work, but if he would like to launch a nonprofit or charity and use his available funds over an estimated 5 – 7 year period, we could impact 1,000 widows. I then asked him what other alternatives he had with regards to his philanthropic activities, and he responded that their family office had many possible avenues. It turned out that there were other opportunities where the benefits delivered per dollar were greater and we decided not to pursue the Widows and Orphans venture.

Having agreed first on what success was on BOTH dimensions allowed us to push back on a determined stakeholder without damaging the relationship. In this way we likely prevented an expensive failure and his funds were deployed to good use elsewhere.

Enter the Nonprofit

Shortly after disengaging from the project I was told about a nonprofit organization that was interested in launching a similar project. The organization was a Church-based nonprofit with a number of in-country initiatives in place. I traveled to meet with them in order to share what I had learned and to hear from them how they believed their venture could be profitable. After listening to their proposal I articulated what I believed to be the critical constraints in the project, and the ones our team was unable to remove or sufficiently ameliorate in order for there to be an acceptable solution. However, they believed they

would be able to overcome other important production and operations variables, and in so doing would launch a successful venture where the previous entrepreneur had failed. I offered to render our assistance if they would share their data and negotiated slightly reduced price from Feeds. The organization launched the project and we received no further information until approximately 12 months later.

Unfortunately their project failed after a year at considerable cost to the organization. They had underestimated key corrosive costs and learned an expensive lesson. The key corrosive costs that destroyed the venture were: inventory shrinkage, mismanagement, and the failure of a proposed natural feed conversion stimulant to perform to expectation. I reported back to our donor on the experience and revisited the DDPs that were done.

All indications are that we conserved entrepreneurial talent and ensured the deployment of scarce philanthropic capital to higher impact activities. One of the key lessons learned was that we were unable to help everyone, no matter how dedicated.

4.4.3 Expectations and Learning

The table below summarizes the expectations and learning from the field study, and includes the reflections on the earlier studies. The combination of findings is reported in more detail in the following chapter.

Table 4.8: Expectations and Learning (Widows & Orphans)

Expectations of Venture Challenges	Affirmation of Expectations	Anomalous to Expectations	New Findings	Revised Expectations
Social impact versus economic gain			Social impact and economic gain specifications	Social impact versus / and economic gain
Resource accrual / lean resources	Management skills		Human resource skills deficiency / scarcity (structural)	Resource requirements, scarcity of skills
Innovation / newness	New market segment, new distribution model			Innovation / newness
Near-Knightian Uncertainty	Infrastructure (power, transportation, legal), logistics, Agent self-interest			Near-Knightian Uncertainty
Redirection	Entrepreneur to Feeds to non-profit: unsuccessful			Redirection
Possibility of project termination / failure	Unsuccessful			Possibility of project termination / failure / success
Cost uncertainty	Logistics, management		Agent self-interest	Cost uncertainty
Structure of payoff change	Production profits from incumbents / entrepreneur to many small-scale producers			Structure of payoff change: Yes (but ineffective)
Positive / negative unanticipated consequences	None / negative (Feeds financial & reputation)		Feeds social capital impact	Unanticipated consequences, both positive and negative
Socio-politics	Local entrepreneur vs. beneficiaries & Feeds			Socio-politics
Disengagement / aspiration reduction			Social impact & economic gain specifications assist with stakeholder disengagement	Disengagement / aspiration reduction

4.4.4 Field Study Summary

As each project unfolded old learning was reinforced and new learning was undertaken. When a new learning emerged I was able to revisit the other projects in order to establish whether or not they exhibited a similar phenomenon, or one that was different, or in conflict. In this iterative fashion I was able to return multiple times to each case, constantly

looking for insights with respect to recurring challenges faced by SWE's in near-Knightian environments.

The first part of the analysis of the situation was the analysis of each project, the second being the coding procedures followed. A number of key themes and insights emerged from the coding. The next chapter contains a description of each as well as the propositions derived.

5. Inductive Insights and Propositions

In this dissertation I have considered the emerging field of social entrepreneurship through the “structure of payoffs” lens as articulated by Baumol (1993a) and Bauer (1972). This perspective is supported by Popper’s “Rationality Principle” (1963), and Dray’s “Rationale of Action” (1957) in social science research which posit that individuals will act “appropriately to their situation.” In other words, people act in accordance with their own self-interest, or utility function. Given the societal orientation of a social entrepreneur I present the utility of a SWE as expanded from the singular objective of financial returns to incorporate positive social impact; which is sometimes, but not always, a tradeoff of profits against social impact.

Baumol (1996) warns that productive entrepreneurship may be hindered by unproductive or destructive entrepreneurship in the form of adverse incentives. Entrepreneurship empirical data shows that the failure rate of new ventures is typically high (Aldrich & Fiol, 1994; Bruderl et al., 1992; Camerer & Lovo, 1999; McGrath, 1999; Singh et al., 1986), and even higher under conditions of high uncertainty such as venture capital investing (Barney, Busenitz, Fiet, & Moesel, 1996). It follows then, that we should expect similar new venture failure rates in emerging, or development environments, and that the limited available resources in many such lean-resource settings should therefore be used parsimoniously, and to greatest effect. Put differently, if we acknowledge that the probability of success is low, resources are scarce, and Baumol’s productive entrepreneurs are ubiquitous but restrained, can we begin to uncover the means with which to unshackle and enable them as agents of constructive socio-economic development?

Below I lay out each of the inductive findings that emerged from reflecting on the challenges that surfaced in the field research projects. I use evidence from each case to support each insight and subsequently reduce each insight to a proposition.

5.1 The Need to Reconcile Expectations and Tensions between the Dual Outcomes of Social Impact and Profit

In every field research project the entrepreneur was challenged by stakeholders to clearly articulate how the for-profit entity was a “legitimate” societal wealth enterprise rather than a regular business merely disguised as a socially-minded activity in order to obtain privileged access. This challenge was reiterated by skeptical students in classroom discussion and also by project funders (primarily interested alumni from The Wharton School) who insisted that we: i) consistently measure and report a metric of societal impact that was specified and agreed upon *ex-ante*, and ii) ensure the venture management team were equipped to defend against organization scope and / or mission creep.

To add further complexity to the pursuit of dual-objectives, each case provided evidence of an “instance of tension” where a key stakeholder desired one outcome, income or social impact, over the other. In each case such tensions can be explicated using Popper’s rationality principle, Baumol’s structure of payoffs, or Dray’s rationale of action. To reiterate, for some, the term “payoff” is broader than simply profit or income. The payoff may be an enabling factor for future position, an intrinsic reward for an individual such as a physician who cares for an unemployed patient in exchange for heightened community status.

Once again, near-Knightian uncertainty manifested itself in the outcome expectations. Even though there was no way of accurately predicting what the dual outcomes would or could be, expectations from project participants were typically high – both with respect to returns and with social impact. Other stakeholders however, such as banks and vendors, challenged the need for a social impact, favoring “conventionally acceptable” profits.

In discussions of how the WSWP might support a SWE we observed that the social entrepreneurs reached agreement on an acceptable tradeoff between impact and profits more

easily by first setting an initial social impact goal, and then establishing their minimum required profit objective. It is beyond the scope of this dissertation to explain why, however I surmise that by starting with the social impact objective the social entrepreneurs and key stakeholders were comfortable that the venture was legitimately oriented around a worthy societal purpose. Once the dual objectives were agreed upon, we used the proposed business model to specify scope of the business required to deliver each objective. If the scope required to make social objectives or the scope required to make financial return objectives was implausible, we iterated back to the objectives and the business model and either redirected or terminated, as I did with the Widows and Orphans project.

The dual objectives established for each project were as follows:

Feeds:

- Social impact: at least 1,000,000 daily protein servings (50 grams) delivered within the target market per annum
- SWE profit objective: at least \$50,000 per annum by year 3

Medical:

- Social impact: Increase the lifespan and quality of life of at least 20,000 patients per year for 8 years (initial scope was to train at least 70 nurses nationwide to use the program, thereby reducing physician workload)
- SWE profit objective: at least \$80,000 per annum by year 5

Baked Goods:

- Social impact: train and employ at least 300 so-called unemployable women from the townships
- SWE profit objective: at least \$100,000 per annum by year 5

Widows and Orphans:

- Social impact: the provision of at least 1,000 widows with an poultry production opportunity to earn at least \$1500 / year income (average Zambian village wage \$1,200)
- SWE profit objective: at least \$100,000 per annum by year 3

I observed that the combination of uncertainty of demand with nonsingularity of objectives led to the SWE's being continuously equivocal regarding desired outcomes, and thus subject to constant pressures of mission drift. For example, Feeds was pressured into supporting the heavily subsidized Widows and Orphans project as part of the larger organization's Corporate Social Responsibility Program (CSR) and the clinic in Botswana was talked into establishing a nonprofit center where front line health workers were able to mix, share experiences, and de-stress from the rigors of physically demanding and emotionally draining HIV care. Such examples are commonplace in resource-poor settings and where there is little else but hope offered by a successful activity albeit created for another purpose. This complexity of pursuing nonsingular objectives will precipitate conflicting challenges from stakeholders like investors seeking financial viability and others, like benefactors seeking social outcomes. I therefore posit the propositions below.

Note: There are two kinds of propositions in this section: those that could be anticipated for entrepreneurial start-ups in general and are therefore predictable, and those that were not anticipated and emerged specifically for SWEs. Where the relevant proposition could be anticipated I have so indicated by starting the proposition with the word: "predictably".

Proposition 1a: *Predictably, the SWE will expend significant effort and energy in constantly having to reconcile the tensions created by competing demands from disparate stakeholders to demonstrate the efficacy at achieving both societal and financial objectives.*

Proposition 1b: *Predictably, over time, and under pressure from stakeholders, SWEs will tend to experience significant mission drift in the direction of decreased social and financial aspirations.*

Proposition 1c: *SWEs that have not clearly framed their social impact objectives subject to declared financial performance objectives, will struggle more to mobilize and maintain stakeholder support than SWEs that have.*

5.2 Uncertainty Reduction and Aspiration Cascades

On the positive side, and differing from regular entrepreneurial ventures, with a focus on profit as outcome, the nonsingularity of objectives in the face of demand uncertainty and organizational learning will create options to relax the profit constraint while retaining the social objective. In other words, the management team will be able to progressively reduce the profit objective, without necessarily reducing the social impact objective, if they believe the venture is no longer capable of meeting their income needs. This novel consideration presents the SWE with an opportunity to convert the program to a charitable or NGO organization, thereby opening up alternative opportunities for exit or redirection.

When the medical and Khaya projects proved unable to meet their profit objectives, I discovered that some ventures could be redirected into something very different than we had originally planned. As long as we did not remain obsessed with profits we could generally find an alternative, albeit less profitable, solution. While these alternatives were less effective and efficient than planned, they still did “good”, even if the original profit objective

was not met. Furthermore the discipline of forcing the entrepreneurs to think hard about making a profit generally reduced the cost of whatever redirection was sought. So focus on profit was highly beneficial, but obsession with it left opportunities fallow. The near-Knightian condition manifest here is that of uncertainty with regards desired outcomes and objectives. Early goals are based upon limited knowledge of context, beneficiaries, and other stakeholders, and are subject to change as market knowledge is gained. Examples of redirection in the WSWP ventures are offered here.

Feeds:

When the first target market segment (rural villages) did not work out due to the cost of logistics in remote locations, Feeds redirected to customers closer to urban centers. The entrepreneur had to eschew serving all locations, but had huge impact on those locations (peri-urban) it chose to work in.

Medical:

The first envisaged revenue model was the sale of anonymized data to pharmaceutical companies doing HIV/AIDS related research. However, the entrepreneur soon discovered that the single-site dataset was not large enough to be of statistical value to pharmaceutical companies in that there were too few patients in the dataset. In the meantime patients begun to respond favorably to the EMR, particularly its ability to help them adhere to their drug regimes, so the project was redirected to focus on patient data representation and drug adherence monitoring. Unfortunately, we could still not identify a sufficient revenue model. After the 2008 financial crisis we disengaged by transferring all patient data to a nonprofit that continues to deliver the patient record services. This was a significant reduction of aspirations but ensured that the beneficiaries continued to benefit.

Baked Goods:

Though the expanded version from the small local pilot did not work out due to lack of revenues from US-based customers, the small pilot operation was sold to a local producer that still continues to employ a team of workers in the townships. Far fewer numbers are employed than envisaged, and far less profit is made – but there are still positive outcomes. The project could have continued on a much bigger scale if, instead of insisting on profitability, a joint venture with an NGO could have been created. After exiting the venture I discussed this model of redirection with Alicia. Her comment was “I wish I had thought of this option in South Africa. I would have gladly transformed the venture into a nonprofit.” The entrepreneur is currently managing a nonprofit that delivers training and employment skills in the baking industry for the unemployed in the US.

Widows and Orphans:

The scheme failed to deliver sufficient profits and / or localized socio-economic impact. After multiple assessments of the proposed follow-on project we elected not to pursue it because we believed it was not possible, under existing conditions, to meet the dual objectives of the interested philanthropist. An NGO attempted a similar project and failed at great cost. In order to assist this target beneficiary segment it is very likely that subsidy through charity is the only plausible means of building a program with positive economic impact in outlying villages. One example exists to the geographic north of Feeds in which an international NGO provides the founding capital for dairy cows to local village women, and Feeds sells the necessary feed products at moderate subsidy in order to support the small but growing microenterprises.

Adding richness to the concept of failure and nuance to our views of success, these observations lead to the following propositions:

Proposition 2a: *A significant proportion of SWEs will “convert” to formats with lower profit aspirations.*

Proposition 2b: *SWEs that initially plan, initiate, and pursue a profit objective then convert to an NFP format will create lower cost and more efficient outcomes than entities that do not impose an initial profit constraint .*

5.3 The Emergence of Corrosive Costs

Regardless of how thoroughly and conservatively the entrepreneurs planned for the venture, every project had at least one cost that was either unanticipated or so seriously underestimated that, if left unaddressed, seriously threatened to destroy the venture.

Examples of corrosive costs for each case follow.

Feed:

Raw materials shrinkage reached near-catastrophic levels in certain instances. Ilona constantly discovered new ways that materials were being illegally removed from the organization. Says Mr. J. the transportation manager “...*the driver’s assistant was selling product off the back of the delivery truck while it was moving slowly. At 2KG per bag it adds up! In another instance employees had managed to tamper with the electronic weigh-bridge somehow and were charging participating vendors a percentage of the extra weight added to their delivered load of grain. Even the manufacturer of the equipment couldn’t figure out how it was done!*” Ilona tells a story from 2005 in which the most expensive raw materials, minerals and salts, were disappearing from the locked shed in which they were stored. Senior management members from the group were considering investing in 24 hour digital security audio

visual systems to try and reduce losses. Estimated initial costs were in excess of \$30,000 excluding security personnel. Each store manager blamed the other. Ilona had a different idea: she called the local police chief, the production manager and the store manager who would be solely responsible for the inventory. On the way to collect the police member the driver was instructed to purchase a sealed high security lock and return with it. Once back at the factory Ilona called in the store manager and in front of the policeman and other factory managers asked the store manager to break 2 of the 3 keys from the sealed packaging. He did so. She then made him sign for the sole remaining key in front of witnesses and instructed him that not even she was ever allowed in the storeroom if he was not physically present. And if there were losses then the police chief knew exactly who to arrest. Thereafter stock losses were zero from the minerals store. Constant innovation in the management of this corrosive cost is required to keep inventory shrinkage levels below the 1% mark they are at now. Another cost which proved corrosive was bills receivable. A remarkably high percentage of bills receivable became unrecoverable and ultimately lost to accounting write off as bad debt. This pattern is clear from the analysis of Feeds data and credit is seldom issued today.

Medical:

Despite multiple assertions of information and communications technology (ICT) reliability in Botswana the Medical project was dogged by constant ICT failures, which caused enormous costs. In an email to the programmer, Nikki reported numerous complaints about server downtime: *"It turns out that there is only one server serving the whole of Botswana! It's no wonder the network is so slow during working hours."* In response to this the clinic owner purchased a satellite system to guarantee patient laboratory transfer. This worked somewhat more reliably until the

employee from the laboratory responsible for the role went on holiday for a month. The laboratory had nobody to take over the role. Nikki was then forced to utilize a courier service to manually collect and input the data into the medical system. After that, Botswana lost reliable power supply from South Africa, forcing the clinic to purchase auxiliary power units for the IT network. The system maintenance costs became progressively higher to the point of jeopardizing the project.

Similar to Feeds, there is constant pressure to allow services to be “billed to patient account” and collected on terms. In 2006/7 the medical practice had to write off a sum so large it almost collapsed the practice.

Baked Goods:

Once Alicia had decided to export product to the US one of her key tasks was to establish a logistics system to get her product from South Africa to the US. After evaluating shipping alternatives, FDA approval requirements, US distribution centers, and US ground transportation options, her next step was to establish a sales strategy. Early feedback from store buyers was extremely positive; however, the big surprise came when she discovered that unlike South Africa, many US retailers insisted that a recommended food distributor manage her sales. US distributors wanted a 25% commission on all sales, which was considerably higher than the 5-10% she had expected. Such a high commission rate would have reduced her operating margins to such a degree that she could not be profitable without selling massive volumes. This unexpected and corrosive cost effectively shut out Khaya Cookie from the preferred and established food distribution network. Another key obstacle was that of payment cycles. Alicia was typically required to pay for a container of goods as it left the factory in South Africa. Transportation, storage and distribution times to the US meant that Khaya would get paid for the same product 90 – 150 days later. This gap

between “cash out” and “cash in” put enormous pressure on her cash flow and nearly brought the company to its knees.

Widows & Orphans:

When assessing the first attempt at the Widows and Orphans program by the former entrepreneur, it became immediately evident that the costs of distribution and shrinkage far exceeded initial planned estimates. In fact, this is why Feeds eventually terminated their support of the program, suffering a loss greater than \$200,000 in the process. Reaching relatively remote rural widows had proven to be a difficult, time-consuming and expensive challenge. When questioned about disengaging Ilona made the comment *“I was under enormous pressure to continue support and our withdrawal precipitated the end of it. But it was not our fault. Feeds itself would have been insolvent had we continued another few months.”*

From these examples we see that the combination of uncertainty of physical infrastructure (logistics, power supply, and telecommunications) and the uncertainty of required operations lead to unanticipated costs or costs that are considerably greater than expected.

Proposition 3a: *Predictably, recurring, corrosive costs, unpredicted and / or underestimated, will repeatedly emerge and jeopardize SWE viability.*

Proposition 3b: *The profit objective baked into the SWE will provide a cushion to absorb the shock of the corrosive costs, thereby enhancing the SWE viability.*

In addition to uncertainty in the physical infrastructure we see uncertainty in human resource infrastructure (skills and knowledge). This, combined with uncertainty of commercial success of the SWE, will lead to recurrent and unpredictable shortages of appropriate human resources, as the SWE struggles to recruit and retain a stable and competitive work force.

Proposition 3c: *Predictably, labor instabilities will seriously compromise SWE viability and the SWE will need to expend considerable resources on recruiting and training their work force.*

Proposition 3d: *As a result of the uncertain structure of payoffs for employees of SWEs, many of the recruitment and training costs expended to develop the SWE's work force will be lost as employees use this very training to secure better paying and less risky employment in conventional for-profit enterprises.*

5.4 Deeply Entrenched, Inimical Interest in Sustaining the Status Quo, Despite Suffering

I discovered in each project a consistent pattern of deeply entrenched interests in supporting the “status quo of suffering.” Entrenched sociopolitical and socioeconomic systems had evolved where the status quo was perpetuated to the benefit of some and the indifference of many. In other words, there were powerful forces intent on sustaining the current system of payments that had been created by *past* destructive entrepreneurship. These needed to be overcome, too. This was not just market failure, but governance failure, too. This finding is attributed to the near-Knightian condition of absent or flawed governance structures resulting in the evolution of deeply engrained payoff processes that have high interest in (passive aggressive) perpetuation of the status quo. A key point here is that such interests are typically covert and sometimes impossible to “prove” or produce evidence for. However, much like the “dog that didn’t bark” such interests often manifest as non-action, or inexplicable delays. Examples of such behavior follow:

Feeds:

Regardless of Feeds’ positive economic and societal impact, local authorities appear unable to assist with inventory security at the manufacturing plant or in the

distribution network. The net result is high inventory loss and even when obvious who the thieves are, the rule of law is seldom applied within a reasonable timeframe. Attempted prosecution for wrongdoing requires multiple visits to court, where flexible schedules cause considerable time delays. In an attempt to reduce the drain on management time and schedules, Feeds and its holding company have employed full-time security guards and a full-time employee whose primary role is to represent the organization in court

Medical:

The Ministry of Health had invested huge financial resources in an international consulting firm to develop a nationally mandated electronic data system. However, for a number of reasons, not the least of which was poor estimation of the resources required for training and support in project roll-out, the program was a catastrophic failure. It became clear that the senior sponsoring officials (thankfully now gone) were not about to let themselves be embarrassed or up-staged by a small, inexpensive, regional success of a medical IT project executed by a small private-sector facility. A unique pilot study for patient adherence was funded by the NIH and study approval by a partner university gained within six weeks. Approval to conduct the study in Botswana took an inexplicable 18 months to be granted. During this time a larger and much better funded study using similar hypotheses and methodology was approved in the public sector, once again raising suspicions within the private sector that there was an invisible hand at work in delaying initiatives that might appear to “outshine” the public system, or win additional funding for which the government and nonprofit sectors also competed. An additional challenge was the time-consuming process of acquiring a work permit for skilled foreign workers. The process was fraught with bureaucratic delay and resulted in project delays on a number of occasions.

Baked Goods:

Elders in the township where Baked Goods was operating reached the conclusion that the success of the Baked Goods project would erode their political influence in the township, particularly with the female employees. It took astute political negotiating to convince them not to blackball the project in the community.

Widows & Orphans:

The former entrepreneur and his small management team were unwilling to support a project re-launch without there first being funding or “Aid money” in place. This condition, his local influence, and his preference for sole control of product sales and raw materials distribution effectively closed the door on any possibility of project revival in that location.

The combination of governance uncertainty and rule of law uncertainty will create conditions under which the SWE will face deeply entrenched, inimical stakeholders systemically wedded to, and benefitting from, the status quo.

Proposition 4a: *Predictably, opposition by entrenched inimical opponents will seriously hamper SWE performance.*

Proposition 4b: *Many of the inimical stakeholders will seek to perpetuate the status quo despite the suffering involved.*

Proposition 4c: *Predictably, much of the opposition by these stakeholders will be covert, rather than overt, and will be carried out through means such as unexplained bureaucratic delays or refusals.*

Proposition 4d: *Because property rights are weak and unenforced, some successful SWEs, as they build momentum, can be subjected to “**liability of success**” through the emergence of “rent-seeking” behavior by authorities and other stakeholders.*

Proposition 4e: *To the extent that the SWE managers carry out careful sociopolitical analysis **ahead** of launch, the deleterious effects of inimical interests will be anticipated and often mitigated or reduced.*

5.5 High Probability of Failure of Either / Both Commercial and Social Objectives

After observing multiple projects in conditions of near-Knightian uncertainty, it is clear from the evidence that non-singular objective firms face enormous challenges in simultaneously achieving ambitious social impact and profitability goals.

Feeds Project:

Although successful in meeting and exceeding societal and profitability objectives, Feeds has endured trials and tribulations along the way. One of the first assumed target markets were small-scale poultry producers in rural areas. Although the target beneficiaries were willing participants the logistical costs reduced profits to such a degree as to render the producers unable to meet profitability goals, and therefore unable to meet the commercial requirements of the activity.

Medical Project:

The pilot clinic was successful in delivering higher quality patient care to a large number of HIV patients and meeting the first phase of the project social objectives. However, the entrepreneurs were unable to identify and establish a viable revenue model, ultimately failing to meet their commercial objectives.

Baked Good Project:

The first business continues to operate in South Africa and supplies a number of hotels, retail stores, and an airline with hand-crafted, all-natural baked goods. It has retained many of the original employees and has trained many and expanded

operations. The founding entrepreneur is managing a non-profit in San Francisco that trains the unemployed in the skills of baking. One could argue therefore, that the project has succeeded in a number of ways and over a number of years. Nevertheless, the major attempt at scaling up commercial operations to the export markets was unsuccessful and must be viewed as a failed attempt at an ambitious strategy.

Widows & Orphans Project:

The original project garnered the attention of the public and politicians but ultimately failed to deliver the required levels of profitability to keep it sustainable. It was reluctantly terminated and despite our attention, and that of others, has not been resuscitated. Overcoming the operations and infrastructure uncertainties proved to be a significant impediment, as did recruiting a willing and capable entrepreneur. In spite of great demand for the opportunity by the many widows in the region, the project has proven to be commercially unfeasible at this time.

The combination of multiple objectives, each of which has its own respective uncertainties associated with near-Knightian conditions, suggests that probabilities of success are worse than conventional startups which pursue a singular (profit) objective.

Since the probability of failing is high, the likelihood of the need to exit at some point in time is also high. And the combination of high probability of exit and vulnerability of beneficiaries at exit suggest that SWEs that anticipate exit will leave the beneficiaries better off than those that do not.

Proposition 5a: *Predictably, this high probability of failure has potential for exposing the target beneficiaries of the SWE effort to considerable inconvenience or suffering as a result of vulnerabilities created by the SWE.*

Proposition 5b: *SWEs that anticipate ex ante the high chances of having to exit, and preplan that exit, will leave the beneficiaries significantly better off after exit than SWEs that do not preplan disengagement.*

Given the additional concerns for beneficiaries, I learned that disengagement is more complex, takes longer, and is more costly in the case of a SWE relative to a typical entrepreneurship venture. In the case of the medical software project, disengagement was extended by virtue of the requirements that services to patients could not be disrupted, and patient data were to be transferred to a nonprofit provider - once they were able to manage the data transfer and system installation. The SWE activities were maintained and staff paid until such time as the data integration was complete and the new service was up and running. In the interests of preserving patient care quality this extension of services was delivered at no charge to the clinic.

In contrast, the Widows and Orphans project was terminated immediately and without preparation. Fortunately, no beneficiaries were harmed directly; however, they lost their planned income stream without warning. Even though not the fault of Feeds, many beneficiaries felt that Feeds was responsible for “abandoning” them. Had Feeds prepared for its own potential disengagement (as a critical stakeholder for the 3rd party venture) it may have incurred less negative public exposure.

Proposition 5c: *SWEs will face more complex and costly disengagement challenges than traditional entrepreneurial ventures.*

5.6 Emergence of Unanticipated Consequences

I found that as a result of the near-Knightian uncertainty there were unanticipated consequences of the introduction of the SWE's. Though unanticipated consequences are common to entrepreneurial projects in general, in our research program there were two types

worth noting. First were manifold unexpected positive spinoffs resulting from progress of the venture – a societal bonus as it were. Such bonuses can be profound and might be viewed as the “option value” such as that sought after in uncertain technology investments that succeed.

Second were unexpected negative fallouts that progress created, and which threatened to “justify” the obstructiveness of those with inimical vested interests. Negative fallouts may mean increased, rather than decreased, suffering. This has not yet been explored in the social entrepreneurship literature. Examples of some such consequences follow.

Feeds Project:

Positive fallout:

1. A number of other organizations such as churches and prisons have launched ‘out-grower’ schemes where they help set up similar poultry growing activities and support the purchase of feeds for growers. These activities provide improved nutrition to their communities and also support the activities of Feeds through additional product sales.

2. Because Feeds has been able to sell lower cost, higher quality feed in its region, competitors in the entire country have had to match its cost and quality, so that feed prices in real terms of all producers are lower in 2011 than in 2003, at improved quality levels, thereby benefiting all poultry growers and reducing the cost of protein to consumers in the whole country, not just the Feeds region.

Negative fallout: The large expansion in poultry production is leading to potential environmental damage through poultry waste. A particular problem is the growing quantities of feathers that need to be disposed of. However, such concerns are actively being attended to by industry members.

Medical Project:

Positive fallout: Large-scale success would extend lifespan and vitality of HIV patients, whose labor output would be of economic benefit for the country whose population is being hollowed out by AIDS-related illness.

Potential negative fallout: There was a danger that wide-scale increases in vitality would lead HIV to be ingenuously viewed as manageable and therefore not feared as much as a ‘terminal’ disease, leading to a reduction in precautionary practices.

Baked Good Project:

Positive fallout: Younger employees have moved on to attend college, and / or due to increased employability have gained employment in other sectors.

Potential negative fallout: As the employed women earned income and developed the capacity to purchase goods and services, they ran the risk of becoming targets of theft and “sources of borrowing” from elders, husbands and family within the community. A recent example of such outcomes is seen within the microfinance industry of India where family members have pressured eligible women to increase borrowing to unsustainable levels of debt.

Widows & Orphans Project:

Potential positive fallout: Widows used the income for nutrition, healthcare and schooling of orphans, breaking the poverty cycle. Household income encouraged children to remain in their villages rather than migrate to urban poverty and a life of petty crime. This is a valuable learning given that the number of orphans continues to rise, primarily due to HIV/AIDS.

Negative and potential negative fallout:

1. Significant success of the program could make the elderly women targets of thieves and “protection” racketeers.

2. In the interests of self-preservation, Feeds was forced to withdraw supply of raw materials and production inputs when the third party entrepreneur in charge of the project missed a third consecutive payment. Feeds lost a significant sum of money in unrecovered debt, but more damaging was being cast in a negative light for “abandoning the widows and orphans.” Many people in the local populace assumed that Feeds was responsible for the project termination.

The combination of the many sources of uncertainty means that the final outcomes are likely to be very different than anticipated. What’s more, the very act of reducing these uncertainties can create either positive or negative consequences. In some cases it is possible to consider and anticipate probable second order effects of venture success, thereby leading to the following propositions:

Proposition 6a: *Predictably, under conditions of near-Knightian uncertainty SWEs will precipitate positive unanticipated consequences creating increased positive impact and / or providing opportunity for rapid exploitation of the positive second order effect.*

Proposition 6b: *Predictably, under conditions of near-Knightian uncertainty SWEs will precipitate negative unanticipated consequences creating a need for organizational response or risk venture damage or termination.*

However, while some consequences are not difficult to anticipate, others can be. Here the best that the management team of a SWE can expect is to anticipate and prepare for *possible* second order effects of their success. Emergent positive second order effects can be exploited; emergent negative second order effects can be mitigated or ameliorated. Thus

SWEs that attempt to anticipate possible (as opposed to probable) second order effects are likely to do better than those that do not.

Proposition 6c: *SWEs that anticipate and prepare to exploit positive second order effects will affect greater positive beneficiary impact than those that do not.*

Proposition 6d: *SWEs that anticipate and prepare for negative second order effects will cause less harm to intended beneficiaries than those that do not.*

In summary, I found several pervasive, cross-project patterns that stemmed from the near-Knightian uncertainty social entrepreneurs faced in their projects, and which yielded inductive insights into the challenges that they faced: The need to reconcile dual outcome expectations and tensions; the opportunity for less ambitious redirection through reduced aspirations by relaxing the profit requirement and changing the organizational form without terminating the activity; the emergence of corrosive costs; deeply entrenched, inimical interests in sustaining the status quo; high probability of failure of either or both commercial and social objectives; and the emergence of unanticipated consequences both positive and negative. These challenges are likely to arise in many other social entrepreneurial ventures and therefore provide a rich field for investigation of social entrepreneurship scholars as well as alert social entrepreneurs themselves to possible pitfalls stemming from near-Knightian uncertainty of their ventures. I make no claim that these challenges are exhaustive or even comprehensive. However, I have observed each challenge in each of the field experiments conducted in near-Knightian environments and feel confident that scholars and practitioners alike will benefit through awareness of these challenges.

5.7 Theoretical Problems

In the introduction to this dissertation I posed two theoretical problems with the construct of for-profit social entrepreneurship: the problem of plausibility and the problem of opportunity cost. I shall consider each problem here in light of our learning with each field experiment.

Problem of economic plausibility: As stated earlier, social entrepreneurship does not happen in a vacuum, free from other environmental forces. Baumol's work and the work of others suggest that there are important institutional and economic conditions that facilitate the development of productive capitalist growth, such as clear property rights, the rule of law, a level playing field for competition, limited corruption (few returns to destructive entrepreneurship), and physical infrastructure (such as transportation, power, and water) that enables and fosters economic activity. As I reviewed the four projects it became clear that major inhibiting factors were the absence of such facilitators. Each project had particular nuances, but in every project progress toward profitability was hindered by some failure in facilitation conditions. Put differently, the combination of recurring challenges had an adverse impact on SWE's desired structure of payments.

1. Feeds:

- a. Three of the greatest challenges to sustained profitability and survival facing Feeds are (i) the constant losses of inventory both upstream and downstream, with little to no legal recourse, (ii) the inability to recover late or non-payments from debtors, due to legal costs, thin judicial infrastructure, and time delays in legal processes, and (iii) the volatile foreign exchange rate, which constantly impacts planning for all imported products, raw materials and competing products alike. These issues are relevant to all businesses in the region and regardless of societal contribution, Feeds is not immune. In addition, the emergence of multiple

new competitors has created a broader product choice for all customers, Feeds customers included, thereby further constraining Feeds' ability to generate returns.

- b. Returning to Baumol's structure of payoffs, and the allocation of entrepreneurial talent, Feeds must constantly manage inventory shrinkage, with little legal recourse, in order to sustain firm performance. In other words the "rules of the game" do not adequately restrict or retard such practices. The "innovative" means of theft, or destructive entrepreneurship, must be managed by the firm with relatively little support from the under-developed or over-stretched state institutional infrastructure. Such levels of shrinkage throughout the logistics chain can be viewed as a widespread and informal set of payoffs which, if not effectively managed, would drag the firm into insolvency.

2. Medical:

When asked what the toughest challenges in establishing the medical project were, Nikki and Dr. D. refer to power shortages, ICT infrastructure weakness (although this is improving constantly), and the lack of available programming and IT skills in the market. The vast majority of all medical services in Botswana are provided by the government, which has a world-leading HIV/AIDS program in place. The down side to this, however, is that the private sector is overshadowed by the much larger national government program, which attracts and pays for those with scarce but required skills. Furthermore, given that the country's entire health system is government owned and managed, *any* new high-potential clinical software must first be sanctioned by the national body. This can take extraordinary amounts of time, as the approval body meets

once every quarter. For example, it took nearly 18 months to get a non-invasive medical study approved. The same study was approved in six weeks in the US. By the time the study was approved all budgeted funds had been expended keeping the necessary study personnel engaged. Additional funds had to be secured in order to conduct the research, almost terminating the study before it had started on the ground. An 18-month delay for a start-up is likely to be unattractive at best and terminal at worst.

3. Baked Goods:

The first baked goods factory was located in an undeveloped township outside of Cape Town. Once the community had been engaged to provide support for the activity and ensure the safety of vendors and visitors, the mini factory became a successful operation. However, there was insufficient infrastructure for expansion. In order to expand, Alicia required growth capital. Due to the nature of her business, small scale and supporting disadvantaged communities, such capital is typically available through a government program in South Africa. She discovered, however, that because she was American she was ineligible for financial assistance and was subject to the same institutional constraints as any other for-profit activity.

4. Widows and Orphans:

Inventory management aside, and as per the Feeds project, the greatest constraints in reaching a sustainable project were insufficient transportation infrastructure to reach many of the afflicted widows, the cost of getting to market, and the relative scarcity of available general management skills. Each of the above represents a constraint that is not unique to a social enterprise. All businesses in this region are subject to similar challenges.

I argued in the introductory chapter that in near-Knightian environments many of the institutional and economic conditions that facilitate the development of productive capitalist growth conditions are undeveloped or still in development, which means firms in such environments must, out of necessity, be able to operate without such enablement and/or within high uncertainty and ambiguity. Success means being able to overcome these constraints at acceptable cost in order to generate acceptable returns. I found that the for-profit social entrepreneurs are subject to serious environmental and institutional challenges. However, traditional entrepreneurs face similar challenges, and thus the presence of these conditions alone is insufficient to justify treating the social entrepreneur as a new phenomenon.

However, there are two unique challenges for the for-profit SWE, namely the management complexity presented by *nonsingularity* of utility function, and that of *funding*. With respect to the latter: If the social mission is strong enough to significantly reduce profitability, traditional sources of capital, such as banks, view the venture as neither fish nor fowl, and therefore unattractive. SWEs are also excluded from nonprofit funding sources by virtue of the fact that most nonprofits are precluded from funding for-profit entities. Because of this dilemma, a SWE must rely on alternative means of funding. Such funding sources are emerging from philanthropy to venture funds and will afford novel research opportunities to those interested in multiple utility function investing.

Problem of Opportunity Costs: For social entrepreneurs to attract investors and resources like labor and talent, they must create a payoff structure that sources find superior to alternative allocations of their time and resources. In this study I found a bifurcation – the opportunity costs for management and skilled employees constantly created problems of retention, whereas investors appeared to be willing to live with lower financial returns.

Opportunity costs in attracting and retaining management and skilled employees.

1. Feeds:

One of Ilona's current challenges is to find effective managers to manage Feeds in her absence or when she is away. So far she has been unsuccessful and when asked why this is the case she responds, admittedly without data, that there are relatively few well trained managers in the country and those who are tend to take well-paid positions in the burgeoning mining sector.

2. Medical:

In Botswana the largest medical interventions to date have been led by large NGOs such as the African Comprehensive HIV/AIDS Partnership (ACHAP), the Corporate Social Responsibility programs of large pharmaceutical companies, and the programs of many US universities conducting clinical care and research in the country. Each of the above programs is well funded in foreign exchange and competes in-country for scarce talent and skills. The local private sector is unable to compete with well-heeled NGOs and universities, which use vast amounts of foreign public funding, such as ACHAP and the President's Emergency Plan for AIDS Relief (PEPFAR). The greatest incentives for the entrepreneurially minded lie, therefore, in the nonprofit and public arenas, where the payoffs are greatest.

3. Baked Goods:

Alicia devoted a significant amount of time and effort to the SWE that she founded. All early expenses were funded using her own capital. When asked whether or not she would undertake another similar project she responds: "Yes, I'd like to one day, but for now I need to make sure I can live!" Although tongue in cheek this statement may yield valuable insight. The opportunity cost of launching another venture versus entering the mainstream employment market is great and even Alicia is hesitant to take on the risk.

4. Widows and Orphans:

After the initial failure, I was interested in why it had not worked so I interviewed the entrepreneur. At the conclusion of the interview I asked him if he would use what he had learned in starting up again with our support. He responded in the affirmative but with this caveat: “You must provide me funding in order to do so, and we will need much more to get to scale; but there are many, many widows and orphans so it will be worth it”. When asked if he could raise bank finance to launch the project he indicated that it was unlikely and that he would not be willing to do so. His other commercial interests were cause for consideration of the opportunity costs of taking on the commitment and debt required to re-start the Widows & Orphans program and the subsequent decision to not move ahead.

So in every project I found that while talented or skilled employees were initially willing to participate in a social entrepreneurship venture, that commitment was eventually eroded by the opportunity cost to the employee of not taking a better position. In many cases the experience they developed while working on the WSWP project created increased employability that landed them the opportunity.⁴⁷ One of the recurring complaints in the medical project was “Why could we not keep that programmer? He was so good!” Well, he had devoted a little time to a good cause while on an extended holiday, and subsequently returned to his real job which provided the income (or payoff) desired for his or her family. I found that good, capable, entrepreneurs and managers are scarce and unlikely to forego superior income for too long, regardless of how socially impactful the activity might be. One typical pattern is that of well-intentioned people who spend a few years “paying their dues to humanity” or “experiencing another part of the world”, like in Peace Corps, before moving onto their “real life”. This can cause high costs of recruitment and training, disruption of

⁴⁷ Remember in the Baked Goods project this was actually one of the goals.

workforce continuity, erratic quality of service delivery, and cynicism on the part of the beneficiaries. While it is clear that there are people who will forego some income for the opportunity to create positive societal impact, it is not clear as to a) how many such people exist, and b) the degree to which they will forgo higher income opportunities and over what timeframe. These questions may prove useful for future researchers interested in economic development through social entrepreneurship and the subsequent requirements of distinct factors of production (Solow, 1956), in particular the human resource and skills requirements and availability.

This finding supports Baumol's view in that each of the agents above acted according to their "structure of payoffs" – they "followed the money". It would be easy to cry foul and bemoan their actions but to do so would be to do them a disservice. Many of those who gave of their time and effort had other obligations such as family support, education, and relatively high home expenses in other parts of the world. They did not have the "luxury" of committing indefinitely to an activity wherein they were paid less than they needed or could earn elsewhere.

Opportunity costs in attracting investors

When it came to investors in the four projects, the opportunity cost issue I raised in the introductory chapter did not prevent the entrepreneurs or the investors from choosing the project. The attractiveness of superior returns from alternative investments were generally foregone in favor of the social impact.

1. Feeds:

In the Feeds program Ilona utilized her own capital and convinced an incumbent and well established firm to provide working capital and fixed assets in support for the new venture.

2. Medical:

In the medical program two of our major donors were more concerned with helping those in dire need than making returns. The most supportive of these donors was excited to be able to provide seed funding with no expectation of returns, but he was insistent that once the program was up-and-running it would no longer require his annual support. It had to be self-sustaining. It was this challenge that we were unable to meet as the revenue model proved elusive and circumstances proved too difficult.

3. Baked Goods:

Alicia provided the start-up capital for the SWE and in so doing was fully cognizant of the fact that it was likely to never yield the equivalent returns of an investment banking position or venture capital-type investment. However, she believed the social impact or *humanistic utility* to be a worthy trade-off.

4. Widows and Orphans:

In essence this project was funded by Feeds as a Corporate Social Responsibility program with no expectations of financial return. Feeds was comfortable in doing so due to the positive impact on beneficiaries. However, once the venture losses threatened Feeds itself, it was forced to disengage.

Traditional economics and Baumol's view suggests that entrepreneurial talent and capital would be deployed toward activities in which profit maximization is likely. However, in this study I found that there are investors who will forgo greater financial returns in order to generate the positive social impact promised by the venture. I conclude that there exists a subset of investors that have nonsingular, or dual, utility functions that map to the dual objective functions of the ventures themselves. So for a specific social impact project there

may exist a subset of investors who are willing to trade off economic returns with their particular “humanitarian returns” and provide lower-cost capital to support such social enterprises. This would support a broader definition of “payoffs” than just financial returns. Rather than profits alone, these investors consider and accept humanitarian gains as partial reward for their investment. I can therefore tentatively support the notion of nonsingular utility functions for actors in the social entrepreneurship or development spaces. This perspective can be further supported by Popper’s “rationality principle” and Dray’s “rationale of action” if we accept that for-profit social entrepreneurs and similarly minded investors do in fact maintain a broader view of “return” than simply profit and exercise such considerations in their choices of where to spend their time and funding.

6. Discussion of Results and Implications for Theory

In this section of the dissertation I link field insights to theory, introduce new research avenues, identify study limitations, and offer concluding remarks.

6.1 Social Entrepreneurship

This research was undertaken to answer the research question: What recurring challenges do for-profit social entrepreneurs face under conditions of near-Knightian uncertainty? In order to answer this question I utilized Baumol's structure of payoffs perspective as the lens through which to observe a series of for-profit social entrepreneurship ventures. The iterative field studies were deployed within an inductive research framework drawn from the social sciences, and one which is similar in execution to the studies of Mintzberg and McHugh (1985) and Burgelman (1983). This combination of Popper's explanation of human actions, deployed here through the use of Koertge's Schema (1975), Bauer's structure of payoffs (1972), and Baumol's conceptualization of productive, unproductive, and destructive entrepreneurship (1990), provides a useful means with which to consider the challenges faced by for-profit social entrepreneurs. In each field study it was evident, and affirmatory, that self-interest (payoff structure) was the primary driver of individual actions, whether productive or unproductive, regardless of the existence of a social impact objective. Somewhat counter intuitively, destructive entrepreneurship was evident on occasion, even when venture beneficiaries were clearly at risk, such as in the case of the Widows and Orphans initiative.

In light of current scholarly exuberance around Social Entrepreneurship, the insights drawn from this work are both novel and encouraging in that new avenues of research are proposed. From a practice perspective, however, and with an eye toward on-the-ground

economic development, they are sobering. Near-Knightian challenges are abundant, pervasive, and non-trivial. This research finds no evidence otherwise, and in fact reinforces the expectations from the general entrepreneurship literature that most new ventures will not succeed. Therefore, regardless of high levels of hope and aspirations of national or global impact, it is reasonable, on the one hand, to expect that Social Entrepreneurship alone is not the answer to the amelioration of societal challenge and economic development. On the other hand, it may be argued that in serving as a socio-economic catalyst (Hemingway, 2005), or effectuation agent it is a necessary but insufficient arrow in the Development quiver.

The high likelihood of venture disappointment raises one of the key contributions of this research in that disengagement may well be a more protracted and more expensive process for a SWE than for a traditional entrepreneurial venture. As evidenced in the healthcare case, the presence of beneficiaries, and the social bias of the entrepreneur, might create a tendency for SWEs to take longer to disengage from failing projects thereby incurring greater expense. This has implications for investment and would suggest that managers of SWEs should consider this factor in venture planning and “pre-plan disengagement” in order that it is budgeted for.

That said, however, the Feeds case suggests that when successful, a SWE can indeed impact an industry and better the lives of many. It is here that perhaps we should look more closely. Most extant literature assumes that there is a tradeoff between social impact and venture profits (Dacin et al., 2010; Dees & Anderson, 2003; Hockerts, 2006). However, even though Feeds has been subjected to pressures to do more “social good”, when one considers the business and revenue models, the existence of such a tradeoff is questionable. When Feeds does well, so do its customers. When its customers do well, so does Feeds. By virtue of its success Feeds has been able to raise investment capital for growth and product line

extension; and its business model has been crafted in such a way that a ‘virtuous cycle’ does in fact exist (Thompson & MacMillan, 2010).

One of the second order consequences of this success, combined with other economic growth factors, has been the emergence of robust competition and industry investment. Although this presents Feeds management with heightened levels of competition and the associated difficulties thereof, there is little doubt that the beneficiaries and consumers in the market are better off now than in 2003 with respect to available nutrition. It is difficult to imagine how a nonprofit or charity could reach a similar social impact / dollar ratio. This result has implications for further research, practice, and policy and calls into question the assumption in the literature that social entrepreneurship is a tradeoff between social impact and profits. Given that social entrepreneurs appear to prioritize social impact (Brinckerhoff, 2000; Mort, Weerawardena, & Carnegie, 2003), sometimes at the expense of personal financial income, resource-constrained policy makers might be well served in identifying and supporting social entrepreneurs as catalysts or effectuators (Sarasvathy, 2001; Sarasvathy et al., 2008) in leading the exploration phases toward new market solutions. Should a plausible solution emerge, then other factors of production (Solow, 1956) can be mobilized in execution and growth to scale (March, 1991).

Such a mindset is consistent with the learning and investment scaling of Discovery Driven Planning (McGrath & MacMillan, 1995) and Real Options Reasoning (McGrath, 1999; Trigeorgis, 1997; van Putten & MacMillan, 2004). In this case however, the process of uncertainty reduction resulted in the emergence of a solution space, or “solution zone”, rather than an optimal point of performance of a more traditional venture. This concept is explored further in the following section.

Martin and Osberg (2007) state : “Social entrepreneurship is attracting growing amounts of talent, money and attention. But along with its increasing popularity has come

less certainty about what exactly a social entrepreneur is and does.” In the consideration of the challenges faced by SWEs and the response of their Social Entrepreneurs, this research has begun to add clarity with respect to what a for-profit entrepreneur is and does.

Dacin et al (2010) note that the social entrepreneurship context “brings into relief an increasingly important concern that all forms of business face: how to weave social and economic concerns into the fabric of organization management, to the mutual satisfaction of stakeholders. They conclude their assessment of the social entrepreneurship literature by suggesting that “the most significant opportunity resides in better understanding of the distinctive nature of the mission, processes, and resources leveraged in a social entrepreneurial context.” This dissertation sheds light on the specific nature of mission, process, and resources leveraged of for-profit SWEs in Africa, and in so doing responds to the call for emergent literature.

6.2 The Management of Uncertainty

A recurring challenge working in near-Knightian conditions was deciding how to allocate extremely limited resources in simultaneous pursuit of competing objectives of one or more facets of societal wealth creation as well as profit generation. This particular source of uncertainty, namely how to trade off manifold objectives, is likely to emerge as a business model consideration for firms intent on competing for those segments of customers who are increasingly concerned with the social contribution of business aside from employment. It is my hope that the findings in this thesis, and the observed approaches to articulating and managing nonsingular objectives, serve as a building blocks to further scholarly enquiry.

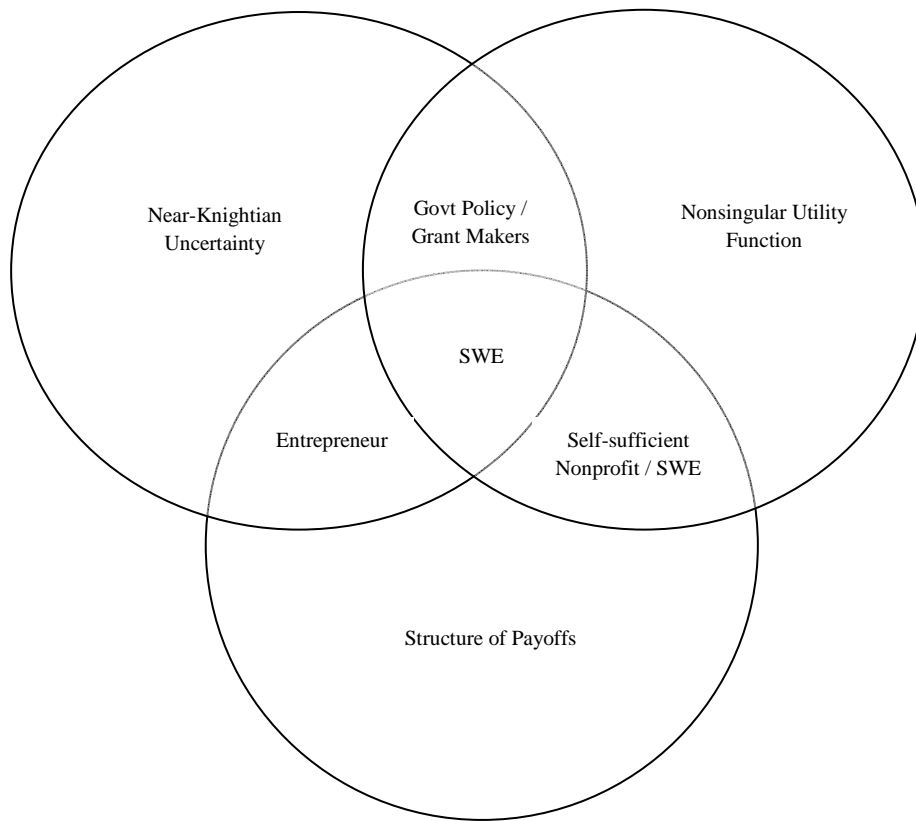
In considering the challenges faced by venture management in this field research, from the perspectives of Bauer and Baumol, each field study has examples of challenges raised due to actions by stakeholders that caused harm to the venture. Perhaps the most

obvious of these is the behavior of the entrepreneur in the Widows and Orphans project. I concluded that the entrepreneur who ran the program misrepresented the number of widows he claimed to serve and was most likely the culprit behind much of the missing inventory. In addition, none of the missing inventory was returned. When asked if he believed the program worthy of continuation his response was “yes, of course, we just need more financial aid.” At the time of my interview Feeds had lost upwards of \$200,000 none of which was recovered. It would appear that this is a case of Baumol’s “unproductive” entrepreneurship, perhaps even “destructive” entrepreneurship, in spite of the severe societal needs in the immediate vicinity.

In the case of Feeds, there exists a never-ending series of “entrepreneurial” or “innovative” activities centered around the theft of inventory, adversely impacting Feeds’ structure of payoffs and inversely increasing the payoffs of the perpetrators. The (formerly unanticipated) consequences of such activities are unexpectedly high management costs – corrosive costs – which further reduce payoffs to owners, management and investors.

This dissertation combines together the three concepts of near-Knightian uncertainty, nonsingularity of utility function, and the structure of payoffs. It is my hope to use these three lenses to begin to build finer-grained insights with respect to the motivation, actions and possible incentive structures for the various actors in the social entrepreneurship space. For example, in the diagram below a purely profit-seeking entrepreneur (also good for the economy) is less likely to be concerned with and motivated by considerations other than venture value creation and financial reward. On the other hand, however, policy makers must consider the needs of the social sector and commercial sector simultaneously.

Figure 6.1: Three Constructs behind the Societal Wealth Enterprise



6.3 A Different Mindset: Social Entrepreneurship as Constraint Identification and Amelioration

Mintzberg's (1978) notes that strategy can be viewed as the interplay between a dynamic environment and bureaucratic momentum with leadership mediating between the two forces. The term *emergent strategy* is coined in this paper suggesting that strategies are not only the result of formal planning processes, but also emerge over time. The inherent uncertainty of innovative opportunities makes it difficult for managers to arrive at sound evaluations of the value of such market opportunities; or an evaluation may even be impossible under conditions of Knightian uncertainty, where outcomes are unknowable (Knight, 1921). Such uncertainty leaves managers in firms with an uncomfortable dilemma. On the one hand they are required to innovate in order to survive and grow; and on the other

hand they are required to exercise fiduciary responsibility when making decisions with respect to resource allocation. However, as March (1991) argues, an imbalance weighted toward exploitation rather than exploration, is likely effective in the short-run but destructive in the long-run. The evaluation of uncertain opportunities is non-trivial (Bowman & Moskowitz, 2001; McGrath & MacMillan, 1995), but the costs of venture development can be contained by “converting assumptions to knowledge” as the venture unfolds.

In a similar vein, I have observed in this research that market failure persists unless a solution space can be unfolded; and that the pattern of this unfolding appears to follow a sequence of constraint / objective activities:

1. When social and financial objectives are decided, they set up a possible solution space, or “solution zone”.
2. Once the business model is articulated, this reduces the possible solution space to a plausible solution space.
3. Anticipated or emergent environmental constraints EITHER further reduce the plausible solution space to a probable space, OR there is no solution space because of killer constraints.
4. If killer constraints exist then UNLESS the SWE can innovate to relax the constraints there is no solution unless the venture can be redirected, effectively relaxing the social and/or financial objectives via aspirations cascading.

In reflecting on the findings of the field research projects it became apparent that under near-Knightian conditions one cannot know all the possible environmental variables and the extent to which they might affect the venture. I observed that the social entrepreneurs conceptualized such environments with a fundamentally different mindset than that of “market exploitation”. Rather, they started by assuming that a market may exist or materialize, but that it was currently overly constrained. The mindset is therefore to examine

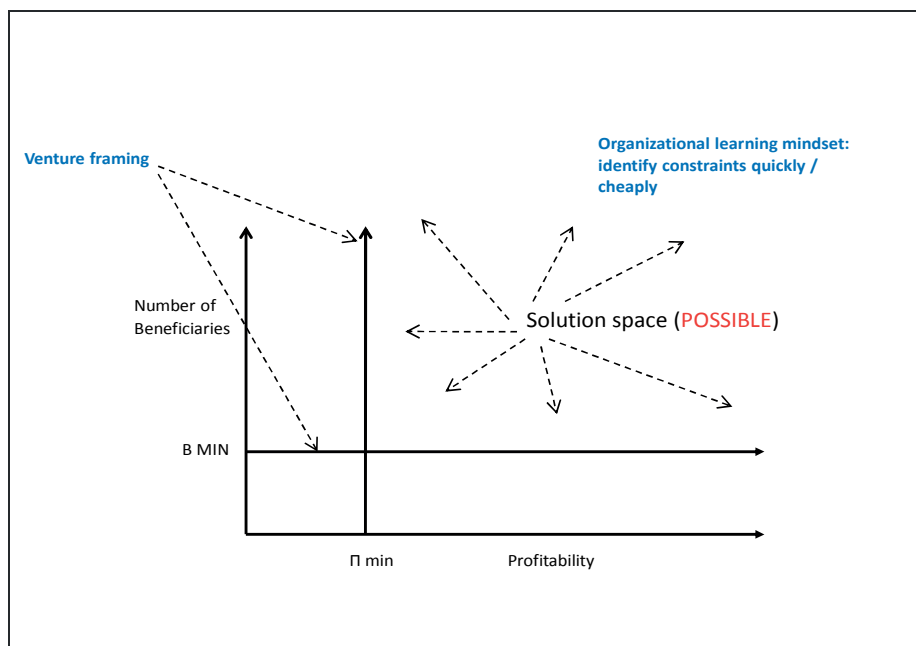
the market expecting there to be manifold constraints that will need to be moved, removed, or innovated around in order for the solution to emerge. We might, therefore, actively seek out obstacles and constraints using the cheapest and fastest methods possible.

I discovered that it is far easier to find out what will NOT work than what might work; or what one should not do rather than what one should.

For example, in Phase 1 of the charts below I set the dual objective minimums of social impact and required profits. This demarcates the total possible solution space.

Phase 1: Dual Objectives with Minimally Acceptable Outcomes set lower boundaries on the possible solution space.

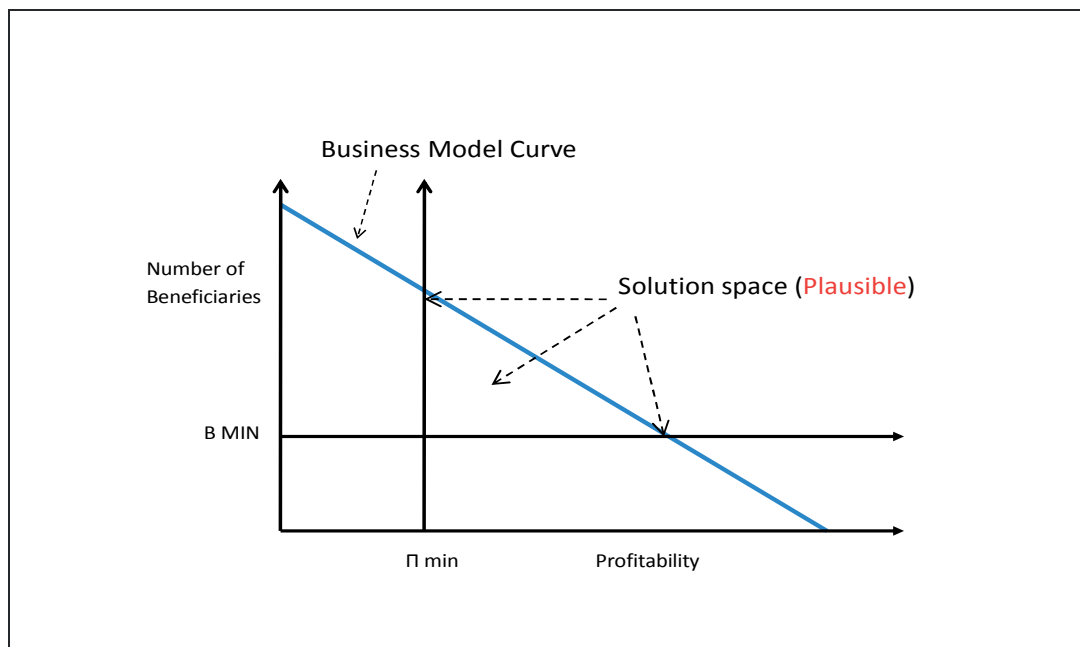
Figure 6.2: Solution space – minimally acceptable outcomes



Phase 2: A proposed Business Model sets upper boundaries on the possible solution space and reduces the possible solution space to plausible solution space (plausible because if the minimal objectives and the business model do not yield an acceptable space there is no plausible business enterprise).

Once the business model has been articulated and estimates of possible social impact and profitability is decided, we could map out the budget curve that reflects the business scope and see where the solution space is reduced.

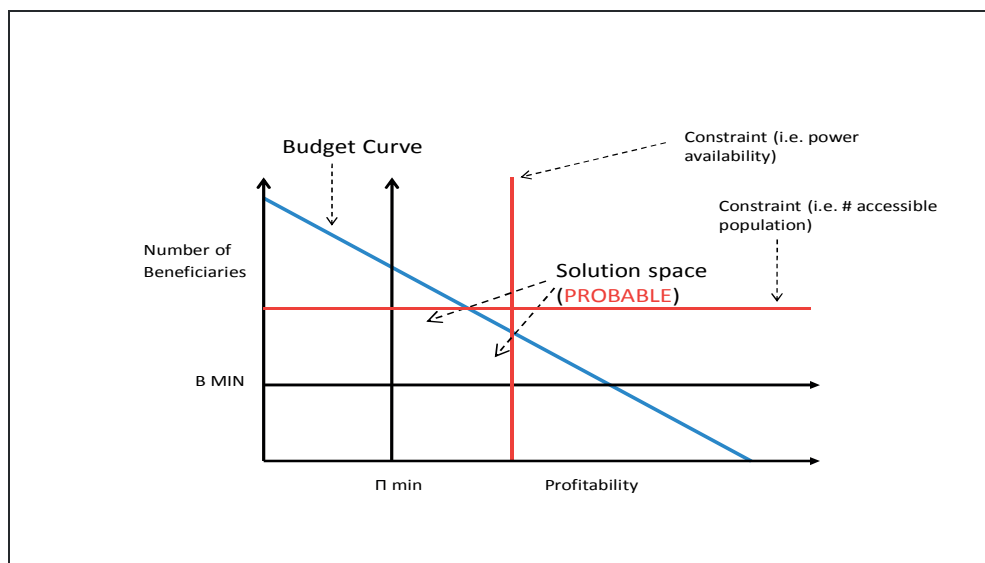
Figure 6.3: Solution space – minimally acceptable outcomes with Budget Curve



Phase 3: Now Environmental Constraints are identified which further constrain the solution.
These constraints reduce the plausible solution space. This **either** yields a reduced area (the objectives of the SWE entrepreneur, the business model, and the constraints yield a probable solution space) or one or more killer constraints preclude a solution.

In the Medical project the entrepreneur considered a target beneficiary population in far northern Botswana. The first critical constraint that could limit the venture impact was the availability of power for operating ongoing medical record capture. This immediately removed many possible outlying sites in rural Botswana, unless, of course, we could innovate around the need for regular electric power. The second constraint was that many patients were not easily accessible due to travel distances and the absence of roads or transportation. These constraints reduce the possible market size to a probable market size.

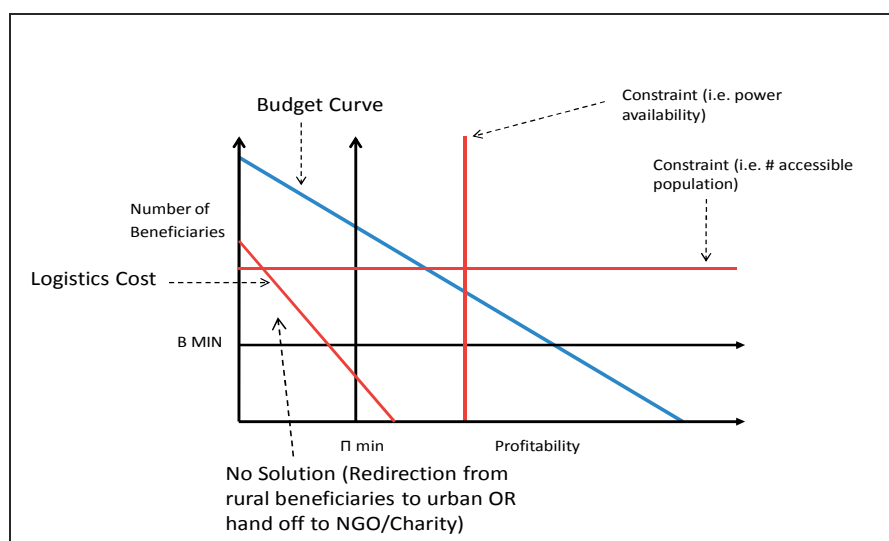
Figure 6.4. Solution space – minimally acceptable outcomes with two constraints



Phase 4: Potential Project Killer Constraint precludes the development of the SWE unless an innovation that relaxes the constraint can be found, or the venture is redirected.

As constraints are added what happens is that one or more constraints emerged as possible project killers. In Botswana, when we introduced the cost of logistics it became apparent that we would need to mitigate these costs for the venture to be plausible. If unable to innovate around the killer constraint (in this case logistics) one is forced to discontinue or hand-off the project in that region to an NGO. This hand off to another organizational form ensures that prior learning is retained and that resources are not completely lost or wasted. In this way we can consider failure in degrees rather than absolute. For example, the original Khaya still exists and, although it did not succeed in growing to aspired levels it remains relatively successful within the local domain.

Figure 6.5: Solution space – no probable solution

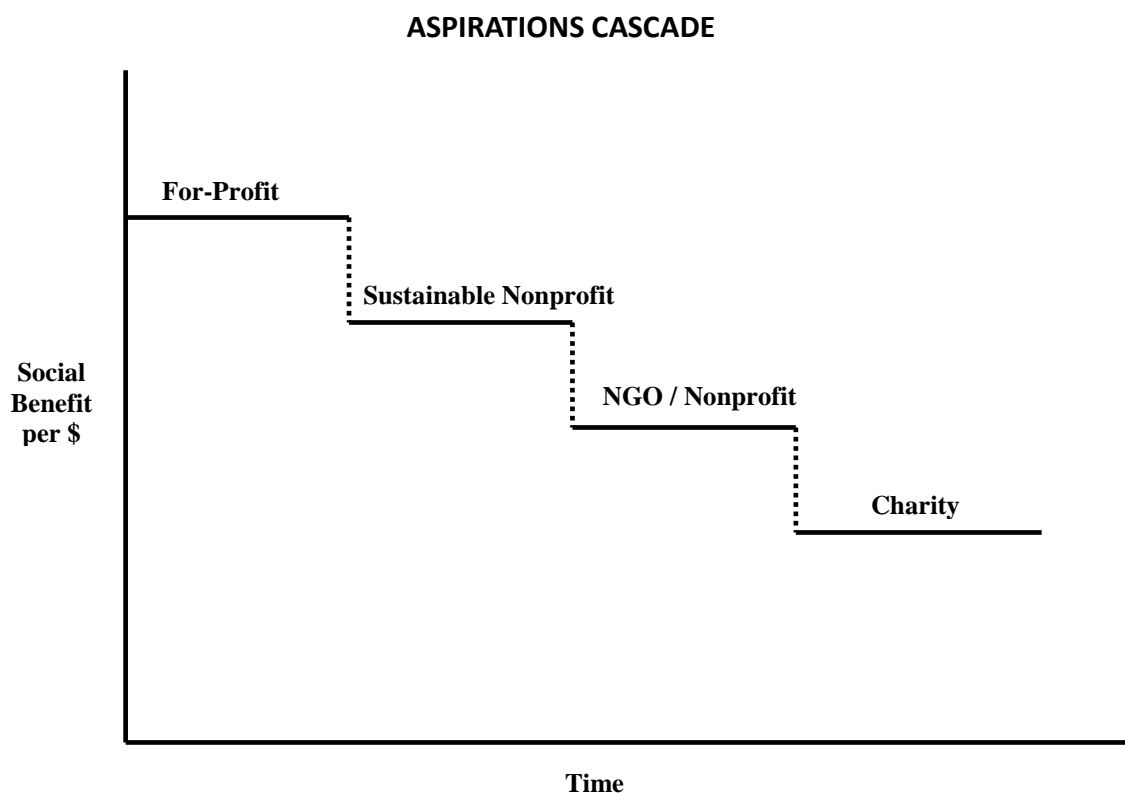


The mindset above was extended further to an “Aspirations Cascade” which can be viewed as a form of redirection that involves expanding the possible solution space by relaxing the initial social and/or financial objectives.

6.4 Uncertainty Reduction and Aspirations Cascades

A novel insight from this research is that lack of profit generation need not be terminal for SWE's. There is often opportunity to reduce aspiration levels AND continue to positively impact beneficiaries, but this requires deftness (McGrath, 1993) in disengagement and reengagement. If done with deftness I observed the entrepreneur is able to disengage without causing harm to the target beneficiaries as well as preserve and possibly even enhance, her social capital, and in so doing retain the legitimacy to operate in the environment.

Figure 6.6: Aspirations Cascade



We can now think in terms of an Aspirations Cascade. It starts with the aspiration to make profits subject to the delivery of social impact. If it cannot deliver acceptable profits, the project cascades toward a sustainable non-profit, which could generate revenues to cover operating costs. If this is not possible, the project cascades down to NGOs / Nonprofits, which require full funding. The final step, once all others are exhausted, is to cascade the

project into a straight charity. Again, the discipline of forcing social entrepreneurs to think hard about making a profit generally reduced the cost of whatever format was finally selected.

Other benefits we might consider from using Aspiration Cascade thinking are:

- In organizations at any lower level of the cascade above, managers can be encouraged to consider how to move some or all beneficiaries to the next level up the cascade. This frees up resources and funding to introduce new beneficiaries into the program.
- Once a venture is self-sustaining it no longer draws from the lean resources available for the social sector. If indeed a profitable venture is created, the immediate beneficiaries receive benefits, but the venture also begins to pay taxes, further contributing to society. In the case of Feeds the venture is now supporting nonprofit programs as part of its Corporate Social Responsibility program.

When do we disengage or migrate across the cascade? By using the nonsingular utility concept, combined with the articulation of utility function metrics, we can now monitor venture performance on multiple dimensions and when they fail to meet one of both of their goals they might begin to consider moving down the cascade.

6.5 Limitations

As to be expected there are a number of limitations to this study:

First, I have utilized a methodology drawn from the social sciences and applied it to the Social Entrepreneurship domain. As far as I am aware this is the first dissertation to use the above approach and also the first to use Baumol's structure of payoffs lens as a means

with which to examine recurrent management challenges in high-uncertainty environments. In doing so, it is likely that I have unintentionally excluded any number of methodological nuances those trained in the behavioral sciences may deem desirable, or even necessary.

Second, and related to the first, is that although I studied four projects, they were all conducted in Africa and will therefore have many Afro-centric features that may not be valid in other regional contexts. It may well be that what appears to be relevant, insightful, and helpful for the program sample will simply not work in Asia, Latin America or other parts of the world.

Third, with respect to *intra*-region generalizability, as stated earlier in the document, random sampling from a population of candidate firms was neither feasible nor possible. So there are only four field projects, opportunistically selected to boot. Therefore, the degree to which the findings can be claimed to apply more generally even in Africa are clearly to be viewed with due circumspection.

Fourth relates to the coding process used for coding the documents. In each project the challenges that I identified were derived from parsing out only those documents containing the chosen cues, when many more synonyms could have been selected. In the coding I elected to focus on identification of comprehensive cues for the challenges we were identifying, rather than a more exhaustive set of cues. This means that many documents which qualified for a particular subset may have been left out of that subset.

Fifth, due to the research question, my focusing on the challenges faced by social entrepreneurs in near-Knightian environments, this dissertation may set an early research path that locks in the formation of narrow and idiosyncratic theory (Eisenhardt, 1989). This is because it is phenomenon-driven, a bottom up attempt at investigating the “how” of for-profit social entrepreneurship ventures, with a paucity of extant literature to draw from, and an

inadequate population of firms from which to draw a more robust, random sample. It is my hope that this work will spawn related research ideas and in so doing begin to drive deeper and more general interest in the development of new theory with respect to for-profit dual-objective social entrepreneurial firms.

Lastly, this study did not concern itself with the important and much larger *non-profit* sector that is engaged in humanitarian social entrepreneurship activities. While some of my findings may be relevant, I acknowledge that nonprofits have unique considerations and stakeholders, many of which have not have been considered in this research.

6.6 New Questions and a Research Agenda

This is possibly the first dissertation to consider the challenges of foreign aid and the emergent field of social entrepreneurship through the “structure of payoffs” lens as precursor to the allocation of entrepreneurial resources within an economy. Furthermore, I believe it to be the first work of its kind to articulate and utilize the intersection between Baumol (1993a) in his commentary on the “structure of payoffs” as antecedent to the allocation of entrepreneurial resources within an economy, the “rationality principle” of Popper (1963), and the “rationale of action” to Dray (1957). During the course of research I observed no sustained behavior by participants that would refute the positions taken by Popper and Dray that individuals will act in their own self-interest; or will do what appears to them to be rational (to them) at the time. However, the existence of investors, or entrepreneurial philanthropists, who seek out and support dual-mission activities, suggests that there is opportunity to uncover which payoffs are considered by providers of such capital and how do they make their decisions. For example, do the subsets of investors willing to trade economic returns for hunger reduction differ from those for disease amelioration? And if so, how? We

might also consider how investors might be better engaged and incentivized to participate in development activities.

The nonsingular utility presents an opportunity to treat social entrepreneurship as a distinct niche within the entrepreneurship field. This may encourage research toward a theoretical understanding of which entrepreneurs make such tradeoffs, what the nature of these tradeoffs is, and how such tradeoffs are affected. This is consistent with Baumol's note (2002 p. 142) of Lionel Robbins' words "...the allocation of scarce resources among competing (and desirable) ends. And the analysis of such tradeoffs is the meat and potatoes of our professional activity." In a related manner, such work would serve as support to Baumol's suggestion that "the socially beneficial side of the spillovers from innovation serves as a very valuable offset to any resulting disincentive to innovative activity."

In considering the aspirations cascades above, and the concepts of multiple or nonsingularity of objectives, we must revisit the question: What is failure? Is it when we fail to meet a social goal; or a profit goal; or both? These considerations hearken back to the earlier work of Sitkin (1992) and McGrath (1999) in the value of learning through failure and clearly offer opportunity for researchers to further develop the insights and tools available for managers and entrepreneurs and policy makers wrestling with wicked social problems. Along similar lines we may ask: What is success?

Future researchers have the opportunity to further investigate the daunting challenges and barriers to the success of entrepreneurial ventures in highly uncertain environments. Importantly, a deeper understanding of these impediments can be used to inform policy and drive investment to those environments which prioritize the removal or mitigation thereof in favor of productive entrepreneurship. This line of research might build off the prior work of Merrifield (1991) and his "modern Marshall plan" for evolving economies, and utilize the

inductive findings of this dissertation to inform a research pathway for profit-seeking approaches to societal problem solving and wealth creation.

Lastly, in light of recent Global austerity, we may experience a resurgence of interest, both academic and practical, in lean start ups, entrepreneurial action, and the process of entrepreneurial venture creation (Bhave, 1994; Carter, Gartner, & Reynolds, 1996). This dissertation highlights some of the likely factors which will be brought to bear in this area, specifically lean resources, effectuation (Sarasvathy, 2001; Sarasvathy et al., 2008) and entrepreneurial process under conditions of near-Knightian uncertainty.

6.7 Conclusion

This dissertation addressed the research question “What recurring challenges do for-profit social entrepreneurs face in attempting to restructure payoffs under conditions of near-Knightian uncertainty?”

To explore this question I adopted an inductive approach to theory building in the form of four sequential and iterative field research experiments. I selected four experiments conducted in the countries of Botswana, South Africa and Zambia in Southern Africa. Experiment 1 was “Feeds” in which the social entrepreneur designed a business model to enable more than 1,600 small-scale producers of poultry to create self-sufficient income streams. Experiment 2 was the “Medical” project in which an attempt was made to introduce electronic software that would enable nurses to participate more actively in the management of HIV/AIDS patients thereby reducing pressure on over-loaded physicians. Experiment 3 was the “Baked goods” company which provided skills training and employment to unemployed and so-called unemployable women in South African townships. Experiment 4 was the “Widows and Orphans” project in which a well-meaning philanthropist desired to assist in re-launching a failed project in support of widows and orphans in Zambia.

More than 12,033 pages of financial statements, email communications, company memorandums, presentations, and field notes were coded for challenges and in the process I built document subsets around the following challenges: unanticipated consequences, redirection, politics, simultaneous social impact and profitability management, and corrosive costs.

As I studied the coded document subsets there emerged six major inductive insights regarding the challenges social entrepreneurs face in near-Knightian conditions. Insights two through six were not unique to SWE's but were considerably exacerbated by near-Knightian conditions. Insight 1 is unique to SWE's and may serve as fertile research ground for students and practitioners of economic development policy who must of necessity consider the deployment of too few resources against the greater needs of a broader society.

- Insight 1 was that was the need to set attractive and convincing social *and* financial goals coupled with the increased complexity of reconciling tensions around dual outcome expectations.
- Insight 2 was that there exist opportunities for less ambitious redirection as opposed to inevitable termination of projects.
- Insight 3 was the emergence of unanticipated, or larger than expected corrosive costs.
- Insight 4 was the emergence of deeply entrenched, inimical interest by certain parties in sustaining the status quo, regardless of suffering.
- Insight 5 was there is a high probability of failure to achieve either one or both of the SWE objectives, namely commercial or social goals.
- Insight 6 was the emergence of unanticipated consequences both unexpected positive spinoffs, as well as unexpected negative fallouts that progress created.

These insights lead me to argue that social entrepreneurship is a distinct niche of entrepreneurship, justifying separate theoretical treatment and sustained research attention. Social entrepreneurship under conditions of near-Knightian uncertainty has the potential to offer fertile research grounds for insight into the unique management challenges presented by nonsingular utility functions and the exacerbating effects of near-Knightian conditions found in many growth markets of the world today.

Appendix

Definitions of Social Entrepreneurship/Entrepreneurs (Dacin et al., 2010, p. 39ff.)

	Source	Definition
1	Alvord, Brown, & Letts (2004)	[C]reates innovative solutions to immediate social problems and mobilizes the ideas, capacities, resources, and social arrangements required for sustainable social transformations. (p. 262)
2	Austin, Stevenson, & Wei-Skillern (2006)	[S]ocial entrepreneurship as innovative, social value creating activity that can occur within or across the nonprofit, business, or government sectors. (p. 2)
3	Bornstein (2004)	Social entrepreneurs are people with new ideas to address major problems who are relentless in the pursuit of their visions . . . who will not give up until they have spread their ideas as far as they possibly can. (pp. 1–2)
4	Boschec & McClurg (2003)	A social entrepreneur is any person, in any sector, who uses earned income strategies to pursue a social objective, and a social entrepreneur differs from a traditional entrepreneur in two important ways: Traditional entrepreneurs frequently act in a socially responsible manner. . . . Secondly, traditional entrepreneurs are ultimately measured by financial results. (p. 3)
5	Cho (2006)	[A] set of institutional practices combining the pursuit of financial objectives with the pursuit and promotion of substantive and terminal values. (p. 36)
6	Dart (2004)	[Social enterprise] differs from the traditional understanding of the nonprofit organization in terms of strategy, structure, norms, [and] values, and represents a radical innovation in the nonprofit sector. (p. 411)
7	Dees (2001)	Social entrepreneurs are one species in the genus entrepreneur. They are entrepreneurs with a social mission. (p. 2)
8	Drayton (2002)	[They] have the same core temperament as their industry-creating, business entrepreneur peers. . . . What defines a leading social entrepreneur? First, there is no entrepreneur without a powerful, new, system change idea. There are four other necessary ingredients: creativity, widespread impact, entrepreneurial quality, and strong ethical fiber. (p. 124)
9	Harding (2004)	They are orthodox businesses with social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximize profit for shareholders and owners. (p. 41)
10	Hartigan (2006)	[E]ntrepreneurs whose work is aimed at progressive social transformation. . . . A business to drive the transformational change. While profits are generated, the main aim is not to maximize financial returns for shareholders but to grow the social venture and reach more people in need effectively. Wealth accumulation is not a priority—revenues beyond costs are reinvested in the enterprise in order to fund expansion. (p. 45)
11	Haugh (2006)	Social enterprise is a collective term for a range of organizations that trade for a social purpose. They adopt one of a variety of different legal formats but have in common the principles of pursuing businessled solutions to achieve social aims, and the reinvestment of surplus for community benefit. Their objectives focus on socially desired, nonfinancial goals and their outcomes are the nonfinancial measures of the implied demand for and supply of services. (Ch. 1, p. 5)
12	Hibbert, Hogg, & Quinn (2005)	Social entrepreneurship can be loosely defined as the use of entrepreneurial behaviour for social ends rather than for profit objectives, or alternatively, that the profits generated are used for the benefit of a specific disadvantaged group. (p. 159)
13	Hockerts (2006)	Social purpose business ventures are hybrid enterprises straddling the boundary between the for-profit business world and social mission-driven public and nonprofit organizations. Thus they do not fit completely in either sphere. (p. 145)
14	Korosec & Berman (2006)	Social entrepreneurs are defined as individuals or private organizations that take the initiative to identify and address important social problems in their communities. (pp. 448–449) [O]rganizations and individuals that develop new programs, services, and solutions to specific problems and those that address the needs of special populations. (p. 449)
15	Lasprogata & Cotten (2003)	Social entrepreneurship means nonprofit organizations that apply entrepreneurial strategies to sustain themselves financially while having a greater impact on their social mission (i.e., the “double bottom line”). (p. 69)
16	Light (2006)	A social entrepreneur is an individual, group, network, organization, or alliance of organizations that seeks sustainable, large-scale change through pattern-breaking ideas in what or how governments, nonprofits, and businesses do to address significant social problems. (p. 50)
17	Mair & Martí (2006)	[A] process involving the innovative use and combination of resources to pursue opportunities to catalyze social change and/or address social needs. (p. 37)
18	Martin & Osberg (2007)	We define social entrepreneurship as having the following three components: (1) identifying a stable but inherently unjust equilibrium that causes the exclusion, marginalization, or suffering of a segment of humanity that lacks the financial means or political clout to achieve any transformative benefit on its own; (2) identifying an opportunity in this unjust equilibrium, developing a social value proposition, and bringing to bear inspiration, creativity, direct action, courage, and fortitude, thereby challenging the stable state’s hegemony; and (3) forging a new, stable equilibrium that releases trapped potential or alleviates the suffering of the targeted group, and through imitation and the creation of a stable ecosystem around the new equilibrium ensuring a better future for the targeted group and even society at large. (p. 35)

Appendix (continued)

Definitions of Social Entrepreneurship/Entrepreneurs (Dacin et al., 2010, p. 39ff.)

	Source	Definition
19	Masetti (2008)	Introduce the Social Entrepreneur Matrix (SEM). Based on whether a business has a more market- or socially driven mission and whether or not it requires profit, the SEM combines those factors that most clearly differentiate social entrepreneurship from traditional entrepreneurship. (p. 7)
20	Mort, Weerawardena, & Carnegie (2003)	[A] multidimensional construct involving the expression of entrepreneurially virtuous behaviour to achieve the social mission, a coherent unity of purpose and action in the face of moral complexity, the ability to recognise social value-creating opportunities and key decision-making characteristics of innovativeness, proactiveness and risk-taking. (p. 76)
21	Peredo & McLean (2006)	[S]ocial entrepreneurship is exercised where some person or group: (1) aim(s) at creating social value, either exclusively or at least in some prominent way; (2) show(s) a capacity to recognize and take advantage of opportunities to create that value ("envision"); (3) employ(s) innovation, ranging from outright invention to adapting someone else's novelty, in creating and/or distributing social value; (4) is/are willing to accept an above-average degree of risk in creating and disseminating social value; and (5) is/are unusually resourceful in being relatively undaunted by scarce assets in pursuing their social venture. (p. 64)
22	Perrini & Vurro (2006)	We define SE as a dynamic process created and managed by an individual or team (the innovative social entrepreneur), which strives to exploit social innovation with an entrepreneurial mindset and a strong need for achievement, in order to create new social value in the market and community at large. (Ch. 1, p. 4)
23	Prabhu (1999)	[P]ersons who create or manage innovative entrepreneurial organizations or ventures whose primary mission is the social change and development of their client group. (p. 140)
24	Roberts & Woods (2005)	Social entrepreneurship is the construction, evaluation, and pursuit of opportunities for transformative social change carried out by visionary, passionately dedicated individuals. (p. 49)
25	Robinson (2006)	I define social entrepreneurship as a process that includes: the identification of a specific social problem and a specific solution . . . to address it; the evaluation of the social impact, the business model and the sustainability of the venture; and the creation of a social mission-oriented for-profit or a business-oriented nonprofit entity that pursues the double (or triple) bottom line. (p. 95)
26	Schwab Foundation	A social enterprise is an organization that achieves large scale, systemic and sustainable social change through a new invention, a different approach, a more rigorous application of known technologies or strategies, or a combination of these. (http://www.schwabfound.org/sf/SocialEntrepreneurs/index.htm .)
27	Seelos & Mair (2005)	Social entrepreneurship combines the resourcefulness of traditional entrepreneurship with a mission to change society. (p. 241)
28	Sharir & Lerner (2006)	[T]he social entrepreneur is acting as a change agent to create and sustain social value without being limited to resources currently in hand. (p. 3)
29	Skoll Foundation	[T]he social entrepreneur aims for value in the form of transformational change that will benefit disadvantaged communities and ultimately society at large. Social entrepreneurs pioneer innovative and systemic approaches for meeting the needs of the marginalized, the disadvantaged and the disenfranchised—populations that lack the financial means or political clout to achieve lasting benefit on their own. (http://www.skollfoundation.org/aboutsocialentrepreneurship/whatis.asp .)
30	Tan, Williams, & Tan (2005)	A legal person is a social entrepreneur from t1 to t2 just in case that person attempts from t1 to t2, to make profits for society or a segment of it by innovation in the face of risk, in a way that involves that society or segment of it. (p. 358)
31	Thompson (2002)	[P]eople with the qualities and behaviours we associate with the business entrepreneur but who operate in the community and are more concerned with caring and helping than "making money." (p. 413)
32	Thompson, Alvy, & Lees (2000)	[P]eople who realize where there is an opportunity to satisfy some unmet need that the state welfare system will not or cannot meet, and who gather together the necessary resources (generally people, often volunteers, money and premises) and use these to "make a difference." (p. 328)
33	Thompson & Doherty (2006)	Social enterprises—defined simply—are organisations seeking business solutions to social problems. (p. 362)
34	Tracey & Jarvis (2007)	[T]he notion of trading for a social purpose is at the core of social entrepreneurship, requiring that social entrepreneurs identify and exploit market opportunities, and assemble the necessary resources, in order to develop products and/or services that allow them to generate "entrepreneurial profit" for a given social project. (p. 671)
35	Waddock & Post (1991)	[A]n individual who brings about changes in the perception of social issues. . . . [They] play critical roles in bringing about "catalytic changes" in the public sector agenda and the perception of certain social issues. (p. 393)
36	Yunus (2008)	[A]ny innovative initiative to help people may be described as social entrepreneurship. The initiative may be economic or non-economic, for-profit or not-for-profit. (p. 32)
37	Zahra, Gedajlovic, Neubaum, & Shulman (2009)	Social entrepreneurship encompasses the activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by creating new ventures or managing existing organizations in an innovative manner. (p. 5)

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Publications

- Gruber, M., I.C. MacMillan, J.D. Thompson. A Tale of Four Genes: How Human Capital Endowments Shape the Identification of Subjective Market Opportunities in Technology Start-Ups. Journal of Management, (2011 forthcoming)
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- Gruber, M., I.C. MacMillan, J.D. Thompson. Mine the Nucleus or Trawl the Network? The Role of the Social Network in Market Opportunity Identification for Emergent Technology Ventures (article in revision)
- Thompson, J.D., Steenhoff, A. P., Cellular Text Message Reminders and Patient Health Impact

Books / Book Chapters

- (Forthcoming) MacMillan, I.C., J. D. Thompson. Societal Wealth Creation: A social entrepreneur's handbook
- Perrini, F., et al: The new social entrepreneurship: what awaits social entrepreneurial ventures? Edward Elgar Publishing, 2006

Recent Awards

- 2009 Best Paper: Thought Leader category of the Entrepreneurship Division at the US Academy of Management
- 2009 Best Paper in Innovation by the European Business School