Organizing Ecosystems for Social Innovation: The Relationality of Contexts and Mechanisms in a Social Entrepreneurship Network

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Dedication

This dissertation is dedicated to my beloved wife,

Melanie Gamble Hausmann

And in loving memory of an extraordinary man, my grandfather,

C. Stewart Hausmann, 1922-2013

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Without the support, patience, and guidance of the following people, this study would not have been completed.

Except for my wife, no one person supported me more than Dr. David Schwandt. Dave provided me the intellectual freedom to explore my own path, create my own voice, and liberated me from pre-conceptions about learning and organizing in a complex world. He encouraged me to continue this endeavor; he stuck it out when the journey became longer than expected, and nudged me in a direction toward examining the world using complexity as a lens. This profoundly changed my professional and civic pursuits in ways that are just now emerging.

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me, grandfather--, his influence, from an early age, instilled in me the value that great things are achievable with sacrifice and a belief in what is possible.

To my parents, Charles and Cathy Hausmann, you gave me the energy, spirit, and quest of deeper inquiry by never bounding my interests and encouraging me to follow my own path.

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Abstract

Organizing Ecosystems for Social Innovation: The Relationality of Contexts and Mechanisms in a Social Entrepreneurship Network

Social enterprises have been emerging to support the growing need to address social challenges in society. However, it is not clear how social entrepreneurs create large-scale change. This research examines the emergence of a new organizing approach, social entrepreneurship networks (SEN), for enacting social innovation.

The premise is individual social enterprises may be limited in their ability to scale, while a network of social enterprises can create greater opportunities for impact. The problem is researchers have tended to focus more on the entrepreneur's human attributes. However, social entrepreneurship networks require an understanding of the interaction between *social actions* and *institutional conditions* that support social value creation. This research addresses a gap in understanding the nature of this interaction and how these networks emerge to enable social entrepreneurs the means to harness the complexity to achieve their ends of social change.

This research found the emergence of a network of entrepreneurs over time, which created novel social patterns. These patterns co-evolved to enable a SEN. This new organizing form was studied through the requisite conditions and social mechanisms necessary to create and scale social value. The conditions included the constraints and influences imposed upon particular agents by *course-grained social structures*. The social mechanisms identified as *fine-grained interactions* included the sets of internal assumptions that specified how people would interact and connect with each other.

These structures and interactions created a set of *dynamical tensions* that enabled the emergence and sustainment of the SEN.

It was concluded that fine-grained interactions are enabled through networks, which provide the social mechanisms needed to lower the probability of failure and increase the level interactions. In addition, course-grained structures are ratcheted—holding on to what works—as a result of fine-grained interactions that enable knowledgeable actors to change the structures. Lastly, dynamical tensions create opportunities for hyperemergence—a form of kick starting—a social entrepreneurship network. Social entrepreneurship networks simulate collective impact, which holds the promise of sustainable social innovation.

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Glossary of Terms

Term Adaptation	Definition A change in a significant attribute of the organization that need not improve competitive advantage or likelihood of survival (Tivnan, 2006)
Adaptive Tension	If a firm is strategically "here" and it needs to be strategically "there" to generate rents (McKelvey, 2001)
Agent	An agent is a thing that does things to things (Kauffman)
Agent-based model	Assumes that agents behave in a stochastic, nonlinear manner and that agents possess a nonlinear capacity to adapt over time (Axelrod, 1997)
Attractors	Attractors are the stable conditions (context and mechanisms) that govern the human dynamics of the system (Hazy 2010a)
Co-evolution	An inherently nonlinear and reactive adaptive process of an entity both with other entities and with a changing, abiotic environment (McKelvey, 2004)
Complex adaptive system	A system that (a) consists of many interacting components, (b) constitutes more than the sum of these interacting components (i.e., the interactions can lead to nonlinear behavior), and (c) possesses some capacity to adapt to its external environment (Holland, 1995).
Context and Conditions	Constraints and influences imposed upon particular agents by external structures (Stones, 2005)
Curated Membership Community	Networks like conference communities, fellowships, coworking spaces, professional networking groups, and meetup groups (Whittemore, 2011)
Embeddedness	How the immediate social structure of inter-actor ties facilitates, constrains, and/or shapes the flow of economic activity and information. (Dacin, Ventresca, & Beal, 1999, p. 326)
Emergence	Refers to the arising of novel and coherent structures, patterns, and properties during the process of self-organization in complex systems (Goldstein, 1999, p. 49)
Enactment	Managers construct, rearrange, single out, and demolish many 'objective' features of their surroundings. When people act they unrandomize variables, insert vestiges of orderliness, and literally create their own constraints (Weick, K.E. 1979, p. 243)
Exploitation	"Includes such things as refinement, choice, production, efficiency, selection, implementation, execution" (March, 1991).
Exploration	"Includes things captured by terms such as search variation, risk taking, experimentation, play, flexibility, discovery, innovation" (March, 1991).
Fitness	Siggelkow's (2001) definition: "a multidimensional space in which
landscape	each dimension represents the values of a particular choice an organization can make and a final dimension indicating the performance value" (p. 840).

Initial conditions Small fluctuation in one part of the system can bring unexpected changes to other parts of the system" (Plowman, et al., 2007) Inter-cohesion A "rich interaction between initially separate but internally cohesive social groups." (Goldstein, et. al, 2010) networks Loosely coupled A situation in which elements are responsive, but retain evidence of separateness and identity (Orton & Weick, 1990) system Mechanisms Mechanisms are small pieces of theory that specify how a specific input will reliably create a specific output (Hedstrom and Swedberg, 1998, p. 25). Network Ties Refer to the strength or weakness of the connections between agents in a system (Granovetter, 1973) Opportunity Pressure on individuals to change current organizing structures to take tension advantage of (exploit) a gap or need in society Organizational New forms of inter-organizational relations to deal with complex eco-system environments that modern organizations now face" (Morgan & Hills, 2006, p. 67) Recombination As a rule, the new combinations must draw the necessary means of production from some old combinations . . . development consists primarily in employing existing resources in a different way, in doing new things with (Schumpeter, 1934) Scalability Scalability is a key component of social entrepreneurship because social ventures are measured in terms of their expected social value (Brock, Steiner, & Kim, 2008). Social Social entrepreneurship is a process of creating value by combining resources in new ways . . . [T] hese resource combinations are intended Entrepreneurship primarily to explore and exploit opportunities to create social value by stimulating social change or meeting social needs . . . [W] hen viewed as a process, social entrepreneurship involves the offering of services and products but can also refer... (Mair & Marti, 2006) Social The process through which new strategies, approaches, practices, innovation concepts, ideas, and solutions are enacted to create social value. Learned characteristics of relationships that underlie information Social Network seeking and sharing (Borgatti & Cross, 2003) Social Value Value created by the participants but enjoyed by society as a whole (Shirky, 2008) An ontology 'in situ', which examines the duality of structure through Strong structuration signification, legitimation, and dominance (Stones, 2005). Tension A local and/or temporary imbalance from equilibrium which creates

The expression of relationship between self and other object (i.e. thing, person, idea, network, organization, etc. (Makiguchi)

the "go" and "energy" for change within all social systems (Buckley,

1968)

Value

Chapter 1: Introduction

Order is not sufficient. What is required, is something much more complex. It is order entering upon novelty; so that the massiveness of order does not degenerate into mere repetition; and so that the novelty is always reflected upon a background of system.

A. N. Whitehead

The growth of philanthropic activities (including social foundations, relief efforts, and environmental activities) in the last decade may suggest society is opening to new forms of organizing for business innovation, that of social entrepreneurship. According to Drayton (Drayton, 2002), social entrepreneurs "see something in society that is stuck, that is not working and envision a system change that will allow them to shift society to a new and better way" (Massetti, 2008, p. 1976). However, it is not clear *how* social entrepreneurs create large-scale change.

Kumar (2010) asks, "...how can social enterprises maximize their impact without having to achieve the financial scale that would make them major players in whole sectors of the economy?" He suggests, "The answer lies in networks. Where one social enterprise may be limited in the impact it can have, a network of social enterprises can create opportunities for substantial financial scale and impact". Reinforcing this notion, Goldstein, et al., (2010) indicate "one of the primary keys for social entrepreneurial success lies in the encouragement of new network connections...as a way to generate and share informational differences" (p. 8). This research will help understand the nature of new forms of organizing social entrepreneurial networks for the purpose of creating and scaling social value.

For example NetAid, a social entrepreneurial anti-poverty initiative, which was a joint venture between Cisco and the United Nations Development Programme, emerged in early 2000. These unlikely bedfellows, one a high-tech firm and the other a global

development program, were not strategically designed to come together. However, a socially conscious vision spurred on by a need by society at that time created a complex social process of business and government entrepreneurs coming together to emerge into this novel network form. The nature of how these network structures emerge and enact social innovation is the focus of this research.

Background

This research is intended to understand the emergence of new organizing approaches for enacting social innovation. These emergent forms of organizing are considered through the requisite context and mechanisms necessary to create and scale social value in a network of social entrepreneurs. In this research, I will refer to the context and mechanisms as an "ecosystem" where diversity of information inside and outside the system creates tension, which forces adaptability through coevolving combining strategies that offer beneficial interchanges of knowledge and resources between agents (Hazy, Goldstein, & Silberstang, 2010).

Organizational Ecosystems

This view of organizing as an ecosystem comes from open systems theory looking at organizations as a system that interact with its environment (Katz & Kahn, 1966; Schwandt & Marquardt, 2000; Von Bertalanffy, 1973). What followed were organizational ecology theories inspired by Trist (Trist, 1977) suggesting that new patterns of inter-organizational relations can help us to better understand the relationship between an organization and its environment as a whole set of constituent organizations. The strength of an ecological approach is that when innovation is a priority, it may be necessary to create "new forms of inter-organizational relations to deal with complex

environments that modern organizations now face" (Morgan & Hills, 2006, p. 67). This is displayed in social entrepreneurship in several ways.

Social Entrepreneurship as an Ecosystem

Social entrepreneurs are part of a process associated with social entrepreneurship. Social entrepreneurship is a context by which entrepreneurship is used for the pursuit of opportunities that serve to sustain a social (not just private) value (Dees, 1998). Mair and Marti's (2006) define social entrepreneurship as "a process of creating value by combining resources in new ways . . . [T]hese resource combinations are intended primarily to explore and exploit opportunities to create social value by stimulating social change or meeting social needs" (p. 3). Through this definition, one can imagine entrepreneurs spurred on by a tension, or gap in society's needs, enacting social change by [re]combining their resources in order to scale their social innovation. This view of social entrepreneurship requires an open systems approach, of that found in organizational ecology, to organizing an ecosystem of social entrepreneurial ventures.

Curated Membership Communities

Curated membership communities are an ecosystem approach to organizing people, capital (human, financial, social), and knowledge. Whittemore (2011) says, it is "an attempt to create the shared experiences which bring us into contact with those people, giving us access to the amazing world which we can see, if not fully yet grasp". This is also a way of organizing that focuses on the network and not the organizational structure. They can include co-working spaces, professional networking groups, meet-up groups, and conference communities. The focus in a curated membership community is more on the social capital. The benefits of participation are through the sharing of skills,

connections and resources with each other. The members provide the greatest value and benefit to each other over the "organizer" or "curator". Understanding the conditions and mechanisms that support social value creation through this type of novel organizing is the purpose of the research.

Tension in Social Innovation

Social tensions represent the "go" and "energy" for change within all social systems (Buckley, 1968; Schwandt, Holliday, & Pandit, 2009; Wasden, 2010). Social innovation is a neo-Schumpeterian view of innovation (Hanusch & Pyka, 2007). It is a process that works through the tensions and contradictions associated with making an improvement to society, while making profits to sustain that improvement. A theory for social innovation could help make sense of the tensions that businesses face in pursuing social activities like:

- Maintaining control, while increasing flexibility
- Exploring new ways of social service delivery, while exploiting what already works
- Being "green", while exploiting finite resources
- Committing to safety, while increasing profit margins

These are fundamental conflicts that speak to the inherent tension with both oppression from above and freedom to express our own will (Freiere, 1975). Most research takes an advocacy position for one or the other --profit seeking or social commitment. However, "social innovation is by no means open to a facile understanding since innovation, by its very nature, involves the unprecedented, the unpredictable, and the non-deducible with respect to current circumstances" (Goldstein et al., 2010, p. 2).

Complexity in Social Innovation

This research follows a tradition of studying organizations as complex adaptive systems (Buckley, 1968). Complex adaptive systems (CAS) have many interacting components with co-evolving networks of agents that are self-organizing in unpredictable ways (Anderson, 1999; Dooley, 1997; Holland, 1995; Thietart & Forgues, 1995). The theory of organizations as complex adaptive systems recognizes that "the social system co-evolves through emergent social phenomenon that allow it to regenerate and self-organize agents' knowledge schemes and social structure for potential next interactions" (Schwandt, et al., 2009, p. 195). This suggests that emergent network structures, the topic of this research study, occur through a self-organizing process of social actors (i.e. agents) co-evolving with each other and the environment.

This research focuses on three non-linear properties of complex adaptive systems (CAS): (a) adaptive tensions, (b) co-evolving networks of agents that are interacting in unpredictable ways (McKelvey, 2004), and (c) emergent, self-organization is not predetermined (Goldstein, 1999; Holland, 1995). Thus, the framework we present will examine the emergent order of social networks and how they co-evolve to adapt to the tensions found in their environments. Specifically, this research will focus on the processes of emergent novel network structuring to create social value. This type of organizing is an especially relevant in loosely coupled networks like communities and networks that have fewer institutional boundaries.

Emergence

Related to the self-generative properties in CAS, emergence refers to "the arising of novel and coherent structures, patterns, and properties during the process of self-

organization in complex systems" (Goldstein, 1999). Taking a social innovation to scale has emergent properties where "local efforts connect with each other as networks, then strengthen as communities of practice, suddenly and surprisingly a new system emerges at a greater level of scale" (Wheatley & Frieze, 2006, p. 1). Inside these scaled-up networks, there is a sense of "possibility and hope that comes from the complexity idea of emergence" (Goldstein, Hazy, & Silberstang, 2008, p. 13). These emergent networks have the requisite conditions and mechanisms through which social innovations can succeed and scale. However, the emergence of novel networks is also dependent on a combining strategic orientation of the agents in the network, which will be discussed later. The ideas, concepts, and models from complexity science provide an epistemological framework that will ground my perspective in this study.

Scalability and Networks in Social Innovation

A big issue facing the practice of social entrepreneurship is the ability for an innovation to scale. Bornstein (Bornstein, 2007) suggests "social entrepreneurs have to reach far more people with far less money, so they have to be especially innovative to advance solutions at scale" (p. 2). Scalability is a key component of social entrepreneurship because social ventures are measured in terms of their expected social value (Brock et al., 2008). Scalability is the ability to maintain or even increase a level of performance or efficiency when tested by larger operational demand. It is a process of creating value by combining resources in new ways . . . [T]hese resource combinations are intended primarily to explore and exploit opportunities to create social value by stimulating social change or meeting social needs" (p. 3), as defined by this research,

which is similar to the concept of a movement emerging through its social network into something larger than could have been known prior to its enactment.

Social impact may be scaled through the collective dynamics of small world networks (Watts & Strogatz, 1998). A recent example of this is the Defense Advanced Research Projects Agency (DARPA) Network Challenge, "a competition that explored the roles the Internet and social networking play in the timely communication, wide-area team-building, and urgent mobilization required to solve broad-scope, time-critical problems" ("DARPA Network Challenge," n.d.). The challenge was to be the first to submit the locations of 10 moored, 8-foot, red, weather balloons at 10 fixed locations in the continental United States. The speed with which the Network Challenge was solved provides a quantitative measure for the effectiveness of emerging new forms of organization that mobilized teams to solve an important problem. The winning team identified all balloons in 8 hrs and 52 minutes by recruiting an inter-organizational network of 5,400 people very quickly to scale-up an appropriate level to solve the problem.

Novel networks (Goldstein et al., 2010) emerge concurrently with new ideas/products because the existing networks and organizational infrastructure are not sufficient to generate and sustain the innovation. Therefore, this research could be considered similar to a Red Balloon network experiment, but for the purpose of scaling a social innovation.

Scalability of social innovations are found in emergent, self-organized networks like curated membership networks. Networks simulate "the value of a larger enterprise while remaining a focused social enterprise" (Kumar, 2010). Self-organized networks

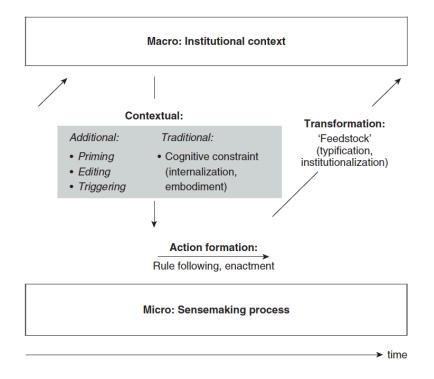
create opportunities to learn from each other. They help develop standards for operating. An example of a network that emerges and self-organizes is a community of practice (Lave & Wenger, 1991). For social innovation, emergent networks can also be effective in lobbying government and regulatory agencies to create social enterprise-friendly business environments. Examples of network that advocate are trade associations. One of the newest forms of social self-organized emergent networks is found when a word spreads over the Internet to meet-up and the group which has never heretofore met gathers together.

Shared Social Value, Sensemaking, and Social Mechanisms

For the context of this research, we will investigate how organizing in novel ways like through curated membership communities increases the capability of scaling for social innovation by creating a shared sense of social value. A community is more than a social network; it is also a "commitment to a set of shared values, norms, and meanings" (Etzioni, 2001, p. 223). Shared social value is where collective action brings about a greater common good. Scaling social innovations may require a shared sense of the social value that the collective is creating. A shared sense of social value is where the individuals and the collective create meaning through an ongoing, enacted, retrospective, and social process that helps them to create an identity, by extracting cues in order to create plausible explanations (frameworks) for what the are enacting (Weick, 1969). This research will use Weber & Glenn's (2006) extension of Weick's work on sensemaking to focus on the social mechanisms (Barley & Tolbert 1997; Hedstrom & Swedberg, 1998) that enable the creation of a social entrepreneurship network that can scale social value.

Mechanisms are small pieces of theory that specify how a specific input will reliably create a specific output (Hedstrom & Swedberg, 1998, p. 25). Weber & Glynn (2006) suggest, "mechanisms-based theorizing often builds bridges across macro and micro levels of social analysis by joining them with three general classes of mechanisms: contextual (input macro → output micro), action-formation (input micro → output micro), and transformation (input micro → output macro)" (p. 1640). These processes are noted in Figure 1 from Barley & Tolbert (1997).

Figure 1: Mechanisms relating institution context to the action context of sensemaking



(From Weber & Glynn 2006, p. 1641)

Using this process, this study will examine the contextual and action-oriented mechanisms that scale social innovation (transformation) by creating a shared sense(making) of social value. This process helps frame the question, what enables and constrains entrepreneurs and organizations to organize to support a change movement? Is

it the social networks in which they are embedded, individual entrepreneurial actions, or some combination of these? Mair and Marti (2006) suggest that we examine "social entrepreneurship as a process resulting from the *continuous interaction between social entrepreneurs and the context* in which they and their activities are embedded" (p. 9, *italics added*). This process-oriented approach to social entrepreneurship creates a framework for understanding how social value is created through a dynamic network that makes up a community of social entrepreneurs.

Problem Statement

The problem for research and practice is that social entrepreneurship is still emerging and not yet well defined (Antico-Majkowski, 2010; Goldstein et al., 2008). Because of this, there is a lack of theoretical and methodological research. Researchers have tended to focus more on the "entrepreneur's" human attributes and actions, like that of Muhammad Yunus with his Grameen Bank in Bangladesh. However, social entrepreneurship is more than Schumpeter's (1942) economic hero framework to social problems (Shaw & Carter, 2007; Schwandt, 2009). It requires an understanding of the interaction between human actions and institutional conditions that support social value creation.

Much attention is played on the economic and market components (like microfinance) that create philanthropic resources, but do not necessarily explain the context and mechanisms through which social value is created. Therefore, it is not well known based on existing theory how social innovations are best maximized and scaled (Hidalgo & Hausmann, 2009). Moreover, there are few models through which to research these complex dynamics.

Social entrepreneurship needs better theory to understand the emergent dynamics that enable the scalability of philanthropic organizations (Goldstein et al., 2010; Silberstang & Hazy, 2008). "Without theory nothing scales" (Snowden, 2010). This research addresses a gap in understanding the nature of how these networks emerge to enable social entrepreneurs the means to "harness the complexity" (Axelrod & Cohen, 2001) to achieve their ends of social change.

Theoretical concerns

Because of the complexity of the problem, no one theory currently explains the social and organizational dynamics in creating and scaling social value. Therefore, this research draws from three theoretical frameworks (i) network theory (Burt, 1995), (ii) complexity theory (Anderson, 1999; Hazy, Tivnan, & Schwandt, 2003; Holland, 1995; Thietart & Forgues, 1995) and (iii) structuration theory (Barley & Tolbert, 1997; Giddens, 1984; Stones 2005) to improve our understanding "in-situ" of emergent structuring dynamics that are enacted to sustain social innovations (Schwandt et al., 2009).

The common thread between the theories is social tension. Tension is seen as an inherent and essential feature of complex adaptive systems; it provides the "go" of the system, the "force" behind the elaboration and maintenance of structure" (Buckley, 1968, p. 99). As organizations become more complex, "adaptive tensions give rise to emergent self-organization" (Plowman et al., 2007, p. 343). As adaptive tensions create a far-from-equilibrium state, the emergence of social innovations is more possible. This definition of tension is compatible with structuration theory (Barley & Tolbert, 1997; Giddens, 1984; Stones, 2005) where agents in organizations reacting to the tension

associated with the action and institutional realms stretch and break social structures. In a complex adaptive system, the agents' actions, lead them to change, adapt, co-evolve, and transform their structures and practices in order to ensure their survival (Axelrod & Cohen, 1999).

Network theory provides the empirical science needed to examine social network formation, as enacted in practice. Structuration theory provides a framework to understand the duality of agency and structure. The two together provide a means to examine the complex emergent structuring processes enacted to create social value.

Using these theories, this research provides a basis for practice to understand the requisite conditions and mechanisms for emergent networks to enact social change.

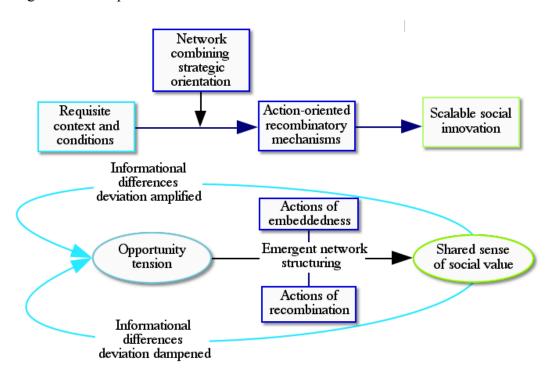
Conceptual framework

This framework draws from the recent conceptual work examining the context and entrepreneurial mechanisms required for new innovation-focused ventures to emerge and succeed (Hazy et al., 2010). In their theory, Hazy and colleagues (2010) suggest that when the context and constraints reach a threshold point "efforts to initiate innovation and organize entrepreneurial ventures can be detected" (p. 35). These ventures can succeed when there are robust recombination mechanisms that allow the sharing of differences. They go on to suggest "active recombination of networks and the presence of inter-cohesion networks positively relates to successful implementation of ventures" (p. 35). This research adopts these principles and extends that theory in two ways. One, this research is context specific, in that it is looking at the specific context and conditions found in social entrepreneurship. Second, it introduces the concept of a "combining network strategy" from network science. This research suggests that recombination of

social networks and increasing the informational differences into the systems requires a network orientation that encourages and facilitates agents combining their knowledge and resources.

The conceptual framework (presented in Figure 2) provides a way of thinking about how the requisite context (Barley & Tolbert, 1997; Hazy et al., 2010; Weber & Glynn, 2006) enables the action-oriented recombinatory mechanisms (Hazy et al., 2010; Weber & Glynn, 2006) through which novel networks emerge to co-create scalable social innovations.

Figure 2: Conceptual framework



• Note:

- Light blue boxes, circles, and lines are context and condition (including the deviation amplifying and dampening processes found in informational differences)
- o Dark blue boxes are action-oriented recombination mechanisms
- Green boxes and circles are outcomes measured through a shared sense of social value

Requisite Context and Conditions

The requisite context can be described by the constraints (or conditions) faced by social innovators. These operational definitions are adapted from Hazy's (Hazy et al., 2010) conceptual article on entrepreneurship. The constraints include *opportunity tension* and *informational differences*. *Opportunity tension* puts pressure on individuals to change current organizing structures to take advantage of (exploit) a gap or need in society. *Informational differences* express the degree to which people are connected to diverse others, but may have different perspectives or information (that must be explored) (2010). In this framework, informational differences create deviation-amplifying processes where greater differences create an awareness of more opportunity tension and the need for social change. This can also work vice versa where fewer differences decrease efforts to detect the need for social innovation.

Structuration theory introduced by Giddens (1984) and empirically researched by Stones (2005), Jarzabkowski (2008), and others, suggests that deep dissipative structures (Smith, 1986) and modalities (Giddens, 1984) in the system set the conditions (i.e. the opportunity tension and informational differences) under which a complex adaptive system operates. Using the perspective of the dualities of social structures found in structuration theory, tension can be expected due to the coexistence of a variety of worldviews (signification), competing values (domination), and personal efficacies (legitimation) (Schwandt et al., 2009). Moreover, human agents' general dispositions and embodied knowledge ('habitus') help explain the "ontology-in-situ" of particular structures and agents in the system (Stones, 2005). Tension emerging from competing schemata provides opportunity for "both the creation of change capacity and conflict

within social entrepreneurial systems" (Schwandt et al., 2009). Schemata are reflections of the conditions which structure the system toward varying forms of emergent network structures and consequently affect the creation and scalability of social innovation.

The modalities of structuration (Giddens, 1984) can be studied as frames for the conditions that drive how the network self-structures to solve problems of social change. The conditions for how we are organized can have implications for how (and at what speed) new social innovations are created and scaled. Using Stone's Model of Structuration, I intend to use the conditions and mechanisms to understand the structuring process at the institutional and action realms.

This study uses structuration theory as a theoretical basis for understanding the conditions that enable and constrain novel networks to combine in order to enact a social change. The purpose is to analyze how actions, that are working through the tensions related to the duality of social structuring, "reproduce or modify institutions over time" (Barley & Tolbert, 1997; Jarzabkowski, 2008, p. 623). Structuration is more than a structure of the social system; it is an integration of organizational structures, roles, norms, objects, and process that provide this dynamic quality (Schwandt & Marquardt, 2000).

Action-oriented Mechanisms

The internal and external conditions create a context through which action-oriented mechanisms (Hazy et al., 2010; Ulrich, 1997; Weber & Glynn, 2006) can enact new forms of organizing. When the context meets a threshold, action-oriented mechanisms recombine resources, capabilities, technologies, and knowledge through the diverse

agents found in the social networks. This action-oriented process enacts emergent network structures like those found in the red balloon experiment.

Recombinatory Mechanisms

When social structuring conditions change in such a way as to enable a shared sense of social value, radical innovation through collective and collaborative action is possible. Schumpeter (1934) pointed to *recombination* as the means by which radical innovation occurs: "As a rule, the new combinations must draw the necessary means of production from some old combinations ... development consists primarily in employing existing resources in a different way, in doing new things with them" (p. 65).

Recombination of social entrepreneurs' knowledge and resources enables the collective with a new way of organizing. Ulrich (1997) suggests that recombinatory mechanisms enable the coupling of networks together.

Inter-cohesion social networks are a combination of strong and weak network structures (Goldstein et al., 2010; Granovetter, 1973). Inter-cohesion supplies a kind of "creative tension" that enables members of these overlapping social networks to "share mental models, resources and practices involving experiments in novelty, so as to render them into seeds of innovation" (Goldstein et al., 2010, p. 14). Inter-cohesion networks recombine through co-evolving social structures that stem from the adaptive tension found in exploring new ways of doing things (greater informational differences) and exploiting what is already known (fewer informational differences). The recombination of networks creates adaptive structures that if pushed far-from-equilibrium will enact novel network structures. This is especially important for social innovation, as co-evolving networks of agents (i.e. social entrepreneurs) working through adaptive tension

(i.e. resource constraints) recombine (i.e. knowledge and resources) to enact novel network structures (i.e. new forms of organizing around a movement) focused around a shared sense of social value.

In order to understand in what way recombining social networks enables a shared sense of social value, I will examine how innovation and recombination effect involvement in a social entrepreneurship network. Schumpeter (1934) suggests that the "innovation process (and not the innovator) is enabled by the combination of resources" (p. 81). Therefore, organizational innovation is often a "process of creating new social connections between people, and ideas and resources they carry, so as to produce novel combinations" (Obstfeld, 2005, p. 100). Social entrepreneurships require building connections among people and organizations in new ways (Goldstein et al., 2010).

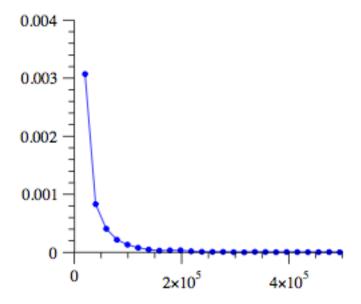
Coordination Mechanisms through Networks of Social Entrepreneurship

Ronald Coase (1937) introduced the concept of transaction costs as a reason why completely open markets for labor could not happen. The reason why institutions exist is to make sure that the coordination costs is lower than the potential gain of directing activities. Setting up groups and coordinating collective action is now becoming cheaper and easier than it has ever been through the advent of Facebook, Twitter, blogs, wiki's, etc. Therefore, the transaction costs of coordinating action are becoming negligible and, thus, new forms of organizing are now possible through combining social networks and recombining their knowledge and resources.

As discussed, social entrepreneurship networks are formed under a tension to change society in some way. "Many events connected under tension...are often distributed according to a power law" (Boisot & Mckelvey, 2010, p. 416). A power law

distribution implies that small occurrences are extremely common, whereas large instances are extremely rare. Figure 3 shows a power law distribution of number of cities (y-axis) and the population of the city (x axis).

Figure 3 Example of a city population power law distribution

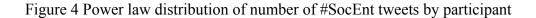


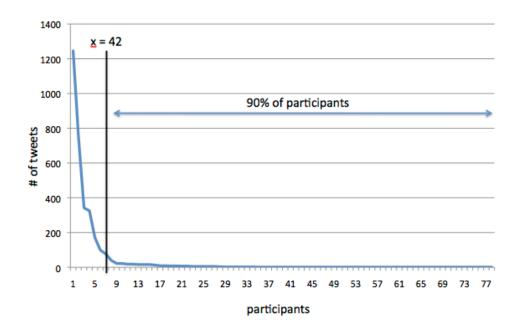
The math suggests that whatever is in the nth position is doing about 1/nth of whatever is being measured relative to the thing in the first position (Shirky, 2008). In unconstrained social systems like those found in non-institutionalized networks, one will find looser networks where small contributors can have big roles. Boisot (2010) suggests, "Power laws signify the existence of scale-free phenomena worthy of our consideration" (p. 417). The scale free phenomenon creates scale invariance where "scalability—that is, the causal dynamics stemming from multiplicative subunit interactions to produce similar outcomes at multiple hierarchical levels (e.g., network organizations such as the Internet)" (p. 417).

The long-tail found in the power-law suggests that coordinating the action of the social entrepreneurship network does not have to discount the 80% of the potential social

entrepreneurship activity. In fact, the 80% are often the ones that are breaking institutional norms often required to enact social change. The institution obstacles, which stem from planning for the average mostly found in the top 20%, are not found in networks where the rest of the 80% of resources are found. Social change is about awaking these resources and utilizing them for social good. This mechanism of coordination is important in understanding the potential for scaling—or scale invariance—needed in social change. For example, the thesis presented in this paper suggests that a network can replace traditional organizing mechanisms which require significant effort in strategic planning with coordination. But, how does a social entrepreneurship network scale their enterprise through coordination? In a network, there is an ability to coordinate the group effort and manage it as we go. This has the ability to reduce the institutional barriers (i.e. context). Can the diversity of knowledge and resources in the social network, scale through the power of their extended network?

Let's take the following analysis for consideration. I examined the twitter records from the larger social entrepreneurship community. Using the meta-data from those feeds, I found 3314 twitter feeds related to social entrepreneurship (i.e. hash-tagged "#SocEnt"). Seventy-eight participants provided the "tweets". That creates an average of around 42 tweets per participant. However, when it comes to scaling social enterprises, the average does not matter. Participation in this social network was analyzed and discovered to be a power law distribution (see Figure 4.)





In this distribution, only the top 10 % of participants provided average or above average output, which accounts for around 90% of the output. Therefore, 90% of the participants are doing a below average amount of work. How do social entrepreneurs use these extended low participation networks to scale their innovations to more people? Unfortunately, the costs of running a traditional institution would mean one could not take on the work of these people in an institutional framework because of the management cost of organizing them.

However, what if in that 90% of low output participants, we find the entrepreneur who has the critical knowledge and resources to help solve a social problem. In the sample above one of the participants in the long tail provided one singular tweet. It said, "The future: Social entrepreneurship meets... outerspacial entrepreneurship? #socent". An interesting post which has the potential to change the "institutional thinking" of the top 10% who are more tightly organized around the topic of social entrepreneurship.

So, why would one give up 10% of the output value, especially if novel system change came from the other 90% of participants? If your system is designed where one has to give up this value; the system could be re-engineered (Shirky, 2008). The coordination and scalable response does not ask how do we manage these people as employees in a single organization, but what is their contribution?

The Network Combining Strategy Mechanism

In order to utilize these untapped resources, we have to understand how networks are combined. This construct of combining networks was the research of Simmel and colleagues (Simmel & Wolff, 1950), who suggests the concept of "tertius gaudens" or the "third who enjoys" connection. This idea suggests that an intermediary between a dyad, can exercise control over new ideas in the network. Tertius gaudens has a central role in the structural holes theory (Burt, 2001). Structural holes present an opportunity to manipulate or exploit the agents to the "third's" benefit.

In contrast, Obstfelds' (2005) concept of a "tertius iungens orientation is a strategic, behavioral orientation toward connecting people by either introducing disconnected individuals or facilitating new coordination between connected individuals.... Such activity is central to the [re]combinative activity at the root of [social] innovation" (Obstfeld, 2005, p. 102) (my editorial comments in brackets). Obstfeld (2005) found in his study of automaker innovations that "the greater the tertius iungens orientation, the greater his or her involvement in innovation" (p. 105).

This concept of "tertius iungens" relates to the resource recombination found in complexity and structuration literature (Morrison, 2005). Building off the research on innovation through networks, I intend to study the function of recombining networks for

enacting social entrepreneurship. To do this, I will use the concept of tertius iungens orientation to understand how social networks are recombined to form novel network structures that are capable of enacting social change.

Embeddedness Mechanisms

Building on the research of network ties, organizations are embedded in complex social relationships with other organizations. Strong ties characterized as a high degree of trust and reciprocity among its members lead to decreased embeddedness, while weak ties characterized by more fragmented and diverse connections lead to increased embeddedness. Social entrepreneurs searching for new partners in a network (increasing embeddedness through weak ties) is a form of exploration. An increase in uncertainty found in the relationships of new partners is likely to be offset by the requisite variety (Ashby, 1956) found in the "benefits of diversification, which should reduce other forms of uncertainty, like technical uncertainty and uncertainty found in major internal changes" (Beckman, et al., 2004, p. 261). An organization's ability to adapt to the environment "varies with the quality of social ties, the structure of the organization network, and an organization structural position in the network" (Uzzi, 1997, p. 35). Understanding the tension of enacting simultaneously increased and decreased embeddedness in the social ties of social entrepreneurs compliments the research agenda proposed in this paper.

Mair and Marti (2006) suggest that "the concept of embeddedness implies that it is impossible to detach the agent (social entrepreneur) from the structure (community, society, etc.)" (p. 9). Therefore, structuration theory provides a theoretical (Giddens,

1984) and empirical (Stones, 2005) lens through which to understand the duality of agency and structure and the interaction between them.

Novel network structuring, a function of the structural embeddedness, is a process of co-evolving networks of agents recombining knowledge and resources. According to Goldstein, et. al (2010), "the process of social entrepreneurship can be thought of as a "wave of change" within social networks that sweeps through the community from left (the old way) to right (a new way) as differences in perspective are recognized, appreciated, explored and synthesized into a social innovation that organizes human activity in a new way." (p. 7). For social innovations to be scaled, networks of agents interacting over time create a mutual co-evolution toward an emergent, novel network structure. ¹

Co-evolution, first described by Maruyama (1963) and Kauffman (1993), suggests that there is an inherently nonlinear and reactive adaptive process of an entity both with other entities and with the changing environment (McKelvey, 2004). Social entrepreneurs are co-evolving as the agents restructure their power relationships, norms, and values and thus form new social relationships. Social co-evolution, is recombination mechanism which is a result of complex dynamics "of the agents [with] capacity [for]

¹ "Over time, social and organizational networks evolve" (Carley, 1999, p. 2). Instead of focusing on networks as evolving linearly over time (i.e. found in the variation, selection, retention models), this research addresses whether "cohesive networks of socially embedded ties or sparse networks rich in structural holes are more conducive to success" (Hite & Hesterly, 2001, p. 275) in specific contexts and points in time during the evolution of the networks.

free choice, multiple levels of stakeholders, and adaptive tensions that emerge from an alteration, or replacement, of existing schemata" (Schwandt et al., 2009, p. 203). This ongoing process therefore creates emerging network structures through the process of recombination.

Mair and Marti (2006) suggest, "it is still unclear how embeddedness effects social entrepreneurship" (p. 14). In order to understand the function embeddedness in social networks plays in enacting social entrepreneurship, I will study the nature of how social entrepreneurs interact inside their networks.

Tivnan (2006) argues, "an organization directly alters its degree of embeddedness via its boundary-spanning activity" (p. 36). Innovative organizations know how to create, share, and use the knowledge embedded in their organizations to make sense of unexpected events, to bounce back after threats or risks materialize, and to adapt to new circumstances (Starbuck & Farjoun, 2005). Knowledge is also embedded in the learning networks that span across organizational boundaries (Knight, 2002). Embeddendess operates in the following way: strong ties characterized as a high degree of trust and reciprocity among its members lead to decreased embeddedness, while weak ties characterized by more fragmented and diverse connections lead to increased embeddedness (Granovetter, 1973).

Burt (1992, 2004) has examined the structure that social networks with structural holes have on idea generation. He suggests that a network with many structural holes, "by situating people at the confluence of different social domains, create opportunities for the novel combination and recombination of ideas" (Obstfeld, 2005). However, this creates a problem for action because people surrounding structural holes

have different perspectives, interests, and languages. The action problem according to Burt (2001) was found when no evidence that ideas generated by structural holes led to implementation.

Marion and Uhl-Bien (2003) suggest "the predominant moderately coupled structure is sufficiently loose to permit localized experiments and adaptations, and sufficiently tight to challenge the structure with conflicting constraints without freezing it into inaction" (Kauffman, 1993; Marion, 1999). Therefore, the network structures that emerge to generate and sustain social innovation have to overcome the action problem found in structural holes and the idea creation problem found in tightly coupled networks.

The context and mechanisms explain the dynamics that are interacting to form novel network structures, or the engine for creating a shared sense of social value. In this framework, opportunity tension gives rise to the need for new forms of organizing. This enacts a process of emergent network structuring inside the organization. This process is influenced by the actors' embeddedness in the existing social structures and the recombination of knowledge and resources inside their networks. Consequently, a self-organized and novel system can emerge around a shared sense of social value.

Network Emergence

The emergence of novel network structures requires agents finding (i.e. deviation amplifying) or rejecting (i.e. deviation dampening) new attractors. Attractors are the stable conditions that govern the human dynamics of the system. Deviation amplification (Maruyama, 1963) enables the emergence of novel network structures through agents' attraction to social innovations. Buckley suggests, "there is no law of social inertia operating here, nor can we count on automatic reequilibrating forces counteracting

system "disturbances" or "deviance", for, whereas we do find deviance-reducing *negative* feedback loops in operation, we also find deviance maintaining and deviance amplifying positive feedback processes often referred to as the vicious circle or spiral, or "escalation". As new attractors enter the system and begin to challenge assumptions about the status quo, the system tends to create more novel forms of social innovation and deviation-amplifying processes (Buckley, 1968; Fiol & Lyles, 1985; Meyer, 1982). The emergence of novel network structures requires agents accepting (i.e. deviation amplifying) and rejecting (i.e. deviation dampening) new attractors.

The degree of embeddedness of a network (i.e. strong ties or weak ties) influences whether there are deviation dampening or deviation amplifying feedback loops, respectively. The emergence of co-evolving and self-organized social structures creates systemic patterns of connections among agents in an organization. These inter-cohesion networks as they become more embedded (i.e. weakly tied) and attracted to new schemata form novel network structures (Goldstein et al., 2010).

Maruyama (Maruyama, 1963) suggests that deviation amplification is a biological, psychological, social, and cultural process. However, the implications of deviation amplification (i.e. similar conditions may result in dissimilar products) necessitate a revision to the law of causality in each field. He suggests, "a small initial deviation, which is within the range of high probability, may develop into a deviation of very low probability or more precisely, into a deviation which is very improbable within the framework of probabilistic unidirectional causality" (p. 4). Therefore, through deviation amplifying and dampening loops, the system begins a complex social dance of whether novel network structures are to be (or not to be). As new attractors enter into the system,

more novel forms of emergent network structures are possible. As emergent network structures become less embedded (i.e. strongly tied), the system tends to organize for exploiting what it already known about the attractor. This deviation-dampening loop is an important aspect of self-sustaining social innovation because it allows the exploitation of the system whereby the social value can begin to be measured, evaluated, and proceduralized, and sustained.

When the system reaches a bifurcation point where it is far from equilibrium, novel network structures self-organize around the new attractor. An attractor in social entrepreneurship is a shared sense of social value. "Emergence happens in complex systems in part, because they are sensitive to initial conditions; that is, a small fluctuation in one part of the system can bring unexpected changes to other parts of the system" (Plowman et al., 2007, p. 343). Lorenz (1963) explains this through his concept of a butterfly flapping its wings in one part of the world creating a storm in another part of the world. Social innovations can be created through small "tipping points" (Gladwell, 2000) that over time change the nature of the structure altogether. In turn, these new structures give knowledgeable agents the capability to make sense in new and formative ways. This has significant implication for understanding how social innovations are enacted.

In summary, opportunity tension and informational differences can be examined as context and conditions, which put constraints on the system. These constraints enable what kinds recombinatory actions can occur and shift the system toward a new structure. Operating between the constraints and the actions are agents with differing combining strategic orientations, which also affect the agents' actions. This is the process of coevolving network structuring that organizes a social entrepreneurship network to take-

hold in some new way, fall apart, or become routinized. These institutional and human action systems affect the types of network structures that are formed. The way the network is structured affects how the agents in the system think about and approach the social challenges.

Research Questions

The conceptual framework has predicated the research questions that will be investigated in this study. Miles and Huberman (Miles & Huberman, 1994) suggest that researchers should set boundaries to define aspects of the cases that can be studied within the limits of time and means and that tie directly to the research questions. This multimethod case study seeks to understand the role conditions and mechanisms play in enacting new organizing networks for the purpose of enacting and scaling social innovation. It will explore two central research questions each with sub-questions. Specifically, the study will examine the interconnections in the conceptual framework as illustrated in Figure 2. The following research questions seek to understand the role of networks (through their agents and social structure) in creating social value:

- 1. What are the contexts and conditions associated with social entrepreneurship networks?
 - a. How do these context and conditions relate to opportunity tension?
 - b. How do these context and conditions relate to informational differences?
 - c. How do these context and conditions relate to strategic, behavioral orientation?
- 2. What are the social and inter-action oriented mechanisms associated with social entrepreneurship networks?
 - a. How do these mechanisms relate to the recombination of knowledge and resources?

b. How do these mechanisms relate to a shared meaning of social value?

Purpose

Through this research, the aim is to understand how social networks co-evolve, emerge, and are enacted over points in time to scale social innovations. How we connect with each other (i.e. the social networks we enact) effects how new ideas are generated and sustained. This is especially true for social entrepreneurs who work through a network of people to achieve and sustain a social innovation. Novel networks (Goldstein et al., 2010) emerge concurrently with new ideas/products because the existing networks and organizational infrastructure are not sufficient to generate and sustain a social innovation. This research addresses a gap in understanding the nature of how these networks emerge to enable social entrepreneurs the means to "harness the complexity" (Axelrod & Cohen, 2001) to achieve their ends of social change.

Overview of Methods

To examine how network structures emerge, I used a multi-method approach of network mapping, questionnaire, and case study. First, research needs to describe the very nature of the network in question through the web of connections between agents in the network. Understanding who is in the network through an analysis of extant documents and discussions will give a scope for the nature of the network to be studied. Using the network map as a starting point, I can examine, through the framework presented in this paper, how they emerge to enact social innovations. Using a questionnaire to examine the agents in the network's strategic orientation, I examined how agents' dispositions affect their involvement in social innovations. Lastly, I've

chosen a case study approach in order to garner a deeper understanding of the emergence of the network over time.

Context and Conditions

The method to explicate the context and conditions will focus on examining if (and to what degree) both conditions –opportunity tension and informational differences --are present to enact new organizing forms for a social innovation. Theory would suggest that for social innovation to happen (and scale), an opportunity tension must exist (Hazy et al., 2010; Schwandt et al., 2009). Through this tension a network of diverse agents (with informational, resource, and technological differences) are networked with an appropriate degree of embeddedness around the social problem. I will seek to understand (through interviews and critical incidents) the existence and degree of each construct --opportunity tension and informational differences-- at the social entrepreneur and institutional levels of analysis.

The method will examine whether the likelihood of the social innovation to succeed and scale is related to the degree to which social networks recombine in novel ways in order create a radical social change. For example, the ability of a diverse group of people coming together (creating novel networks) will consequently affect their ability to create a shared sense of social value (enabling a radical social change).

Action-oriented Mechanisms

The method to explicate the mechanisms will examine whether the likelihood of the social innovation to succeed and scale is related to the degree to which agents in the network actively recombine in novel ways in order create a radical social change. Active agency toward recombination will be examined through behavioral event interviews with members of the social entrepreneurship incubator.

In this study, using Stone's (2005) Strong Structuration, I will develop case histories by analyzing time periods in chronologies, identify structuration themes through a data reduction process, identify the action and institutional realms, analyze patterns of agent behavior and social innovation outcomes, and examined the network structure make-up. The analysis of this data will answer the research questions: what are the requisite conditions, mechanisms, and social structures for creating a shared social value.

Significance of this Research

The significance of this conceptual framework is its contribution to (a) theory, (b) practice, and (c) research.

In the area of theory, research could pull together two theoretical frameworks through the commonality of social tension. Complexity theory can be used as an epistemological perspective in order to understand the emergent and co-evolving social networks in complex adaptive systems (Hazy et al., 2003; Holland, 1995; Tivnan, 2006). Structuration theory (Giddens, 1984; Jarzabkowski, 2008; Orlikowski, 2000; Stones, 2005) improves our understanding "in-situ" of the duality of structuring dynamics that are enacted in organizations. The aim is to elucidate through a framework how the dynamics of networks improve the explanatory power of organizational theorists treatment of social innovation.

In the area of practice, this research has provided a framework for understanding the tensions (Andriopoulos & Lewis, 2009; Lewis, 2000; Luscher & Lewis, 2008; Wasden, 2010) inherent among networks of agents focused on sustaining a social

innovation. Through this framework, social entrepreneurial organizations can guide interventions that change the conditions in order to improve the way their network's social structures enable and constrain social innovation.

Furthermore, the theoretical framework could be used to develop a computational agent-based model through which practitioners can investigate how dynamics of the organizational system are impacting social innovation over time. This type of model can provide insight into complex relationships such as the non-linear impact of emergent networks structures have on social entrepreneurship.

In the area of research, this study is significant because it introduces a need for analysis that captures the competing schemata or "attractors" in the system. The study of the interactions among agents can be accomplished through thorough case study, agent-based simulation and social network analysis. I turn my attention to these methods in the next chapter to get a better sense of the available tools to carry out this research.

Limitation and Delimitations

The limitations in conducting an empirical study using this conceptual framework include the following. There is difficulty in observing the emergence of a "novel network structure" because of its very nature. In order to study this phenomenon, the research must examine, what do emergent network forms look like? What types of networks form? How do we recognize them? How do tensions manifest themselves? These questions are all necessary and relevant to examine the overarching research questions.

In addition, there is difficulty providing empirical evidence of the structuration modalities. Giddens (1984) explains the concepts synchronically, "as simultaneous

reciprocity between action and institutions, making it difficult to analyze how actions reproduce or modify institutions over time" (Jarzabkowski, 2008, p. 623). Therefore, using the framework presented by Jarzabkowski (2008), this research will use the element of time to examine "sequential structuration" to inform the analysis about how patterns of emergent network structuring enable and sustain social innovations over time. This research will focus on the conditions, which hold the attractors (expressed as schemata) around which the networks are structured.

Lastly, the delimitations of social network analyses (degree, closeness, betweenness, etc.) leave us with little information on how networks emerge. Therefore, this necessitates a qualitative approach to understand the nature of the phenomenon: network emergence. The aim of this research will be to elucidate through the framework the process of novel network structuring for the purpose of enacting sustainable social innovation.

In this chapter, we investigated the context and mechanisms of social entrepreneurship, presented a conceptual framework for understanding the requisite parts of the process, discussed the questions this presents for research, described the purpose and significance of this study, overviewed the methods that will be employed, and shared the limitations and delimitations of this line of inquiry.

Chapter 2: Literature Review

Organizational perspective is not an individual activity, but a social activity; people within an organization shape their perspective of complex environments through discussion within social structures

Weick, 1995

In this chapter, I will examine through the literature how emergent, selforganizing network structures affect an organizations capacity to create and scale social
entrepreneurship. The main aim of social entrepreneurship is to further social and
environmental goals. It is theorized in this paper that scalable social innovation is
enabled through the contexts and mechanisms that generate self-organizing and emergent
organizational systems. While social innovations are most commonly associated with
government, voluntary, and not-for-profit sectors, scaling innovation will require these
sectors to merge in novel ways (including with the industry). Therefore, I searched the
literature to understand how these seemingly competing agendas enable social network
structures that are capable of scaling social innovation.

The purpose of this research synthesis is to examine the dynamic social structures that impact a system's social innovative capability. Novel network structures in organizations emerge at the edge of chaos found at the nexus of the organization's adaptive tensions of exploration and exploitation. Consistent with the conceptual framework, this synthesis first provides additional detail on the topic of social innovation through the tensions found in organizational exploration and exploitation. Second, the review focuses on the affect social network structures have in managing the tensions of social innovation. Third, to orchestrate support for the research design for this study, this chapter concludes with a general discussion of case study as a research method in complex adaptive systems.

The literature is synthesized through the following premises:

- Scholars are linking social innovation to theory and research in complex adaptive systems (Goldstein et al., 2010)
- Social innovation as an ongoing adaptive tension between exploration/exploitation framework (March 1991)
- Varying forms of social network structures (i.e. groups of interacting agents) affect on social innovation (i.e. social value creation)
- The context and mechanisms through which emergent and selforganizing networks ultimately scale social innovation
- The modalities of structuration as a method for identifying the boundary conditions that create attractors in the system
- In addition, there are varying forms of social network structures that affect social innovation outcomes (Granovetter, 1973; Orton & Weick, 1990; Granovetter, 1973; Orton & Weick, 1990).

Social entrepreneurship

"Much of the literature on social entrepreneurship centers on defining the concept (e.g., Mair & Martí, 2006, 2009; Peredo & McLean, 2006), with a heavy focus on conceptual over empirical research (Short, Moss, & Lumpkin, 2009)" (Dacin, Dacin, & Matear, 2010). Dacin (2010) summarizes 37 definitions that are currently floated in the literature. As with research in leadership which is focused on the "leader", the literature in social entrepreneurship is focused on the entrepreneur. However, recently research has begun to focus on social entrepreneurship as a process.

For example, Zahra, Gedajlovic, Neubaum, & Shulman (2009) suggest, "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). Mari and Marti suggest

(2006), it is a "process involving the innovative use and combination of resources to pursue opportunities to catalyze social change and/or address social needs" (p. 37). In this definition, they bring process through which the exploitation of opportunity is key to creating social innovation. These definitions are consistent with this research in that social entrepreneurship is a process of exploiting opportunities through recombining resources in novel ways to enact a new organizational form.

Social entrepreneurship is a field of interest that crosses academic disciplines and challenges the traditional assumptions of business and economics. There is currently a "disregard for complexity in economic analysis" (Torras, 2009, p. 221). However, Hidalgo, an economist, and Hausmann recently noted, "development efforts should focus on generating the conditions that would allow complexity to emerge in order to generate sustained growth and prosperity" (2009, p. 2). Therefore, social entrepreneurship literature needs to take into account complexity in its theory.

Complexity

Complex adaptive systems

The literature in complexity science has helped to create a new understanding of an organization as a complex adaptive system. Complex adaptive systems (CAS) have many interacting components with co-evolving networks of agents that are self-organizing in unpredictable ways (Anderson, 1999; Dooley, 1997; Holland, 1995; Thietart & Forgues, 1995). In addition, tension is seen as an inherent and essential feature of complex adaptive systems; it provides the "go" of the system, the "force" behind the elaboration and maintenance of structure" (Buckley, 1968, p. 99). As organizations become more complex, "adaptive tensions give rise to emergent self-

organization" (Plowman et al., 2007, p. 343). Therefore, as adaptive tensions create a far-from-equilibrium state, the emergence of social innovations is more possible.

The outcome of these far-from-equilibrium states produces a bifurcation point, "whereby an originary attractor representing 'business as usual' gives way to new attractor(s) representing social innovation" (Goldstein et al., 2010, p. 4). This creates a scenario whereby entirely new and innovative responses are enacted for problems that are not rational, and inherently complex. This is especially relevant for social innovations that deal with complexity as a natural part of its routine.

Therefore, complexity science has helped to create a new understanding of an organization as a complex adaptive system. The theory of organizations as complex adaptive systems recognizes that "the social system co-evolves through emergent social phenomenon that allow it to regenerate and self-organize agents' knowledge schemes and social structure for potential next interactions" (Schwandt et al., 2009, p. 195). This suggests that emergent network structures, the topic of this research study, occur through a self-organizing process of social actors (i.e. agents) co-evolving with each other and the environment.

Understanding how networks emerge so that they can be scaled to social problems of our day (i.e. education, healthcare, energy, environment, etc.) will require changes to how science thinks about organizations. Organizational scientists have examined the complexity of organizational dynamics (Anderson 1999; Dooley 1997; Holland 1995; Thietart & Forgues, 1995; Uhl-Bien, Marion, & McKelvey, 2007) in order to forge a new understanding of the self-organizing function of organizations. In order to research this phenomenon and its affect on the adaptive tensions inherent, we must go beyond

traditional science, which breaks organizations into "factors" that account for variance in a planned organizational system.

Emergence of novel network structures

In addition, complexity theory views organizations "as complex systems composed of heterogeneous agents (the organization's members) whose interactions with each other are varied and difficult to predict" (Silberstang & Hazy, 2008, p. 3). Silberstang and Hazy (2008) argue that the "developing trends in social entrepreneurship are in need of an explanatory theory and that complexity science includes the bottom-up emergent characteristics that these new philanthropists demand" (p. 13). Complexity science is geared for these kinds of inter-disciplinary and non-linear problems.

Recombination and Inter-cohesion networks

Goldstein, Hazy, and Silberstang (2010) suggest, "at a critical threshold, the social system undergoes bifurcation as extant social components are recombined leading to the generation of novel social forms that can more sufficiently resolve the social problem or take advantage of the opportunity" (p. 4). Moreover, it is the emergence of the network that sustains an innovation, not necessarily the innovation itself. Sustainable social innovation is innovation that uses the dualities of network structures and the dualities of innovation (exploration-exploitation) to generate and create the conditions for longer-term staying power.

The recombinatory "mechanisms" needed for radical innovation require an understanding of the "initial conditions for creating what Goldstein, Hazy, Silberstang (2010) called, "inter-cohesion social networks". A case study of inter-cohesion social

networks that take the emergent form of novel networks structures (i.e. between two seemingly unrelated organizations) will help us understand how social structures emerge.

What we can learn from other networks

Complexity theory has been applied empirically to terrorist networks as self-organized emergent complex adaptive systems (Krebs, 2002; Marion & Uhl-Bien, 2003). In these examples, terrorist network cells like the ones formed to carry out the 9/11 attacks were examined in terms of their emergence and sustainability of leadership. In addition, complexity theory has been applied to case studies of entire societies like China (Boisot & Child, 1999). In the case of China, "its organizations and other social units have correspondingly handled this complexity through a strategy of absorption rather than the reduction strategy characteristic of Western societies" (1999, p. 237).

Yet, unexplored in complexity research in natural biology (Malcolm & Goodship, 2001) and artificial life research (Langton, 1997) is the "relationship between an organisms' genotype (or the primitive instruction that are genetically encoded by the organism's chromosome), and an organisms phenotype, or its emergent macroscopic form (which includes both its physical morphology and how it interacts with other organisms)" (Illichinski, 2009, p. 5). Therefore, understanding how networks emerge to sustain social innovation requires a deeper study of phenotype.

Adaptive Tensions of Exploration and Exploitation in Social Innovation

This research seeks to examine the adaptive tension between explorative and exploitative innovation in order to understand the dynamics of organizational structuring activities in a complex adaptive system (Gupta, 2006; He, 2004; Holmqvist, 2009; Kim, 2009; March 1991). Exploratory innovation is characterized as the pursuit of "new

knowledge and the resulting products and services for emerging customers and markets" (Jansen, Vera, & Crossan, 2009, p. 5). Exploitative innovation is described through the efficiencies found in using "existing knowledge resources and extend existing products and services for current markets" (2009, p. 5). This exploration-exploitation tension, found in the organizational structuring practices can simultaneously both inhibit and encourage social innovation in an organization.

The tension has been examined from the perspective of balancing the two (March 1991) or simultaneously doing both through ambidexterity (Gupta, Smith, & Shalley, 2006; He & Wong, 2004; Raisch & Birkinshaw, 2008). Some treat them as a continuum (March 1991), but new research suggests that they are orthogonal, or independent of each other (Beckman, Haunschild, & Phillips, 2004a). When examining this complex and sometimes paradoxical phenomenon (Andriopoulos & Lewis, 2009; Holmqvist 2009), most research has examined organizational variables (Pandey & Sharma, 2009; Raisch & Birkinshaw, 2008) and environmental impact (Beckman et al., 2004a; Jansen et al., 2009; Kim & Rhee, 2009) that affect a firm's ability to explore new knowledge and/or exploit current knowledge. Recent research has examined the use of social network theory to understand how an organization's social structuring practices including organizing structures, organizing network ties, and inter-firm networks (Kilduff, Tsai, & Hanke, 2006) affect the management of the adaptive tension of stability (i.e. exploitation) and change (i.e. exploration). Raisch and Birkinshaw (2008) call for ambidexterity research that reflects the complexity of the phenomenon using *both* exploration *and* exploitation.

Research could help explicate the tension of pursuing *both* polarities of exploiting what an organization knows *and* exploring what is unknown to achieve sustainable social

innovation. Andriopoulos and Lewis (2009) presented a framework for understanding paradoxes of innovation, which include strategic intent, customer orientation, and personal drivers. Each has a tension that must be managed at all organizational levels through a strategy that is aware that both explorative and exploitive activities coexist and are complimentary of each other. Lewis (2000) presents a model that investigates tensions including "polar constructs [of] quality/cost, differentiation/integration, stability/change, and cohesion/division" (p. 762). Lewis suggests that Eastern philosophies like those found in the Taoist symbol of Yin and Yang examines these contradictions as inherent in all action. Managing paradox requires reframing in order to "move from an either/or decision to a *both/and* perspective" (Luscher & Lewis, 2008). This type of perspective was exemplified when a manager presented with a tension came to the realization he had to do *both*: "let go *and* retain control" (Luscher & Lewis, 2008, p. 229). The nature of social structures found in these kinds of adaptive tensions is the focus of this research.

There is an abundant literature base that "warns about the difficulties of managing exploitation-exploration tensions" (Andriopoulos & Lewis, 2009). Efforts toward examining these tensions have been understood by a) using paradox as a lens for working through the tension (Lewis, 2000; Luscher & Lewis, 2008), and b) investigating the organizational factors that constrain or enhance our ability to manage them (Holmqvist, 2004; Pandey & Sharma, 2009). However, there is little research that has examined social network structures' affect on managing the exploration-exploitation tension. In response, this research aims to enable a better understanding of the adaptive tensions of

explorative and exploitive network structuring mechanisms through the emerging field of complex adaptive systems (Anderson, 1999; Dooley, 1997; Holland, 1995).

This research builds on prior theoretical research that examines the adaptive tension between exploration and exploitation (March, 1991) and the social network structures that provide the architecture for systemic adaptation (Burt 2001; Kilduff et al., 2006; Nahapiet & Ghoshal, 1998). This conceptual frame uses adaptive tensions to examine reinforcing cycles and emergent network structures. This framework will extend prior theoretical research by examining the informal social network structures that co-evolve and emerge to influence an organization's ability to manage the tensions inherent in doing both explorative and exploitative social innovation activities.

The tensions of exploration and exploitation on social innovation, originally explicated by March (1991), are a way of understanding the dynamics of social systems. Social entrepreneurs who are trying to improve society while simultaneously making a profit face these tensions. Social innovations are increasingly becoming important and relevant because "the world-wide economic crisis plus the confluence of global warming, food shortages due to rising populations, drought and political struggles, and the spread of HIV/Aids and other infections diseases in an increasingly interconnected world demand innovative, perhaps even radical, ways of thinking and acting" (Silberstang & Hazy, 2008). Therefore, understanding the adaptive tensions of social innovation is important.

Ambidexterity, Balance, Equilibrium, Paradox

March (2006) suggests "exploitation without exploration leads to stagnation and failure to discover new, useful directions: whereas "exploration without exploitation

leads to a cascade of experiments without the development of competence in any of them or discrimination among them" (p. 205). The tension between exploratory innovation and exploitative innovation has been investigated as balancing on a continuum (Gupta et al., 2006; J. G. March, 1991), as orthogonal (Beckman et al., 2004), as ambidextrous (He & Wong, 2004; Raisch & Birkinshaw, 2008), as reactions to uncertainty in the environment (Beckman et al., 2004; Jansen et al., 2009; Kim & Rhee, 2009), and as a paradox (Andriopoulos & Lewis, 2009). I will review these various explanations of the exploration-exploitation tensions, then turn the readers' attention to the explanation that focuses on moderate coupling.

When treated as a two ends of continuum, an organization can specialize in one or the other. Alternatively, it can alternate between exploration and exploitation through periods of change that induce punctuated equilibrium. When treated as a sliding scale across a continuum, ambidexterity requires a balance somewhere in the middle. Gupta et al., (2006) argue that an organization's adaptation requires balance between exploration and exploitation to be sustainable in the face of a changing environment. For example, He and Wong (2004) found in their survey of 206 manufacturing firms, the interaction between explorative and exploitative innovation strategies is positively related to sales growth rate, and the relative imbalance between explorative and exploitative innovation strategies is negatively related to sales growth rate.

Beckman et al. (2004) found the difference between exploration of "new possibilities" and exploitation of "old certainties" is not a continuum, but is orthogonal. According to research (Gibson & Birkinshaw, 2004; Raisch & Birkinshaw, 2008) ambidexterity in organizational structures is achieved by "developing structural

mechanisms to cope with the competing demands faced by the organization for alignment and adaptability" (p. 211). In the conceptual framework presented in chapter one (see Figure 2), I extend this conceptualization that having both, simultaneously, will increase the internal variety required to manage contradictions and tensions.

Kim and Rhee (2009) make the case for internal variety in organizational subsystems in order to respond to environmental dynamism. Imagine the competing subsystems that could be coupled to counter-act uncertainty in the environment. For example, loosely coupled (explorative) systems could counter-act exploitive organizational structures (strong tie internal networks and friend inter-firm networks). This type of internal variety could prevent a hyper adaptation toward exploitative network structures, which could result in deviation dampening feedback loops.

This paradoxical phenomenon (Andriopoulos & Lewis, 2009; Holmqvist, 2009) has been examined through the tensions, contradictions, and the management of "virtuous cycles of ambidexterity" (Andriopoulos & Lewis, 2009, p. 707). Andriopoulos et al.'s multilevel approach manages the nested tensions of innovation (profit--breakthrough emphasis, tight--loose coupling, discipline--passion). They found that organizations must manage the adaptive tension through techniques of integrating the contradictions or differentiation between them. These findings illuminate our understanding of how firms can make sense of the adaptive tension of exploration and exploitation.

Adaptive network structures

An organization's ability to adapt to the environment "varies with the quality of social ties, the structure of the organization network, and an organization structural position in the network" (Uzzi, 1997, p. 35). Therefore, examining the variety found in

networks as hierarchical and socially self-organized (Moss, 2001), as strong and weak ties (Granovetter, 1973), and as friends and strangers (Beckman et al., 2004) allows us to understand the tensions that organizations are managing. These conceptualizations all look at how centralized, routine, and mutually dependent the network structure operates compared to how decentralized, non-routine, and independent the network operates. This framework helps create meaning from the complexity of the organizational dynamics that affect exploration and exploitation in organizations. Sharing with others what we know, while keeping our eyes open to what is unknown is the complex organizational dynamic that merits further investigation of the literature in complexity theory and social entrepreneurship.

Figure 5 The adaptive tensions found in network structures

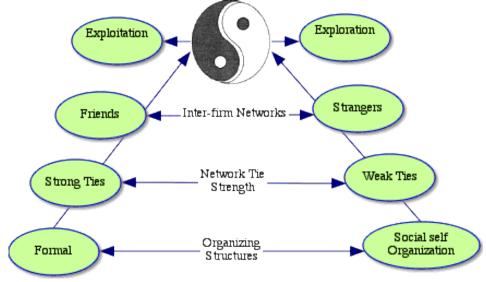


Figure 5 can be used to examine the tensions found in social structures (inter-firm networks, organizing network ties, and organizing structures) that affect an organizations ability to manage exploration and exploitation. Of course, the polarities are only illustrative because the management of the adaptive tension requires an organization to enact social networks that have both. Using these constructs, we build on existing theory

by examining the tensions of exploration and exploitation through social structures of embeddedness of inter-firm networks (Uzzi, 1997), connectedness of our network ties (Granovetter, 1983), and organizing structures (Moss, 2001; Neda, Ravasz, Brechet, Vicsek, & Barabasi, 2000; Orton & Weick, 1990) of actors in the social system.

Marion and Uhl-Bien (2003) suggest "the predominant moderately coupled structure is sufficiently loose to permit localized experiments and adaptations, and sufficiently tight to challenge the structure with conflicting constraints without freezing it into inaction" (Kauffman, 1993; Marion, 1999). Therefore, the network structures that emerge to generate and sustain social innovation will have aspects of both sides of the tensions found in Figure 5.

Tension in Organizational Structuring Mechanisms

The following table examines the social structuring factors and their relationship to the conceptual framework that is being investigated in this research.

Table 1 Organizational Structuring Dynamics in Exploration and Exploitation

Tension	Exploration	Exploitation	Theorist
The Tension of Organizing	Social self- organization	Hierarchical	(Moss, 2001) (Neda et al., 2000)
The Tension of Network Ties	Weak Ties	Strong Ties	(Granovetter, 1973) (Tichy et al., 1979)
The Tension of Embeddedness	Strangers	Friends	(Beckman et al., 2004) (Granovetter, 1985)

The Tension of Organizing

Social self-organizing processes are found to be effective methods of choosing an appropriate structure for seeking new knowledge in a dynamic environment (Moss, 2001). Self-organizing structures for learning can be seen by examining the emergent inter-organizational networks that are created in times of uncertainty (Beckman et al.,

2004; M Holmqvist, 2009; Knight, 2002). Holmqvist (2009) argues that "complicating the organization" through (self-organized) inter-organizational connections is preferable to a balanced or ambidextrous approach preferred by some researchers (Gibson & Birkinshaw, 2004; He & Wong, 2004; Raisch & Birkinshaw, 2008).

Perhaps the most elegant example of social self-organization can be found in theoretical physics. Neda et al., (2000) examine a critical metaphor for my conceptual framework of understanding the social self-organizing (exploration-focused) practices of organizations. They look at the phenomenon when an audience expresses appreciation for a good performance by the strength and nature of its applause. They find that applause at the conclusion of performance in an auditorium often turns into synchronized clapping. This synchronization can disappear and reappear several times. This phenomenon is "a delightful expression of social self-organization that provides an example on a human scale of the synchronization processes that occur in numerous natural systems" (p. 849). The self-organization, complexity, and tension found in our social networks is gaining theoretical grounding for understanding the explorative properties of organizations (McElroy, 2000).

The Tension of Network Ties

Social networks theorists have examined the structure of network ties and their impact on explorative behaviors and exploitive behaviors (Beckman et al., 2004; Borgatti & Cross, 2003; Granovetter, 1973; Maitlis, 2005). For example Borgatti and Cross (2003) found that information seeking (i.e. exploration) is influenced by how well we can gain access to know what others know through out network ties. Weak ties characterized by less time, emotional intensity, intimacy, and reciprocal service (Granovetter, 1973) are

found in new partner relationships, which often are "conduits to new, unique information" (Beckman et al., 2004). Strong network ties can be deviation delimited feedback loops and can "tie up" our knowledge in existing nodes of interaction between social actors. Social network theory can help researchers better discern the tension of enacting both types of network ties impacts exploration and exploitation (Tichy, Tushman, & Fombrun, 1979).

The Tension of Embeddedness with Other Firms

Building on the research of network ties, organizations are *embedded* in complex social relationships with other organizations. Tivnan (2006) argues, "an organization directly alters its degree of embeddedness via its boundary-spanning activity" (p. 36). Innovative organizations know how to create, share, and use the knowledge embedded in their organizations to make sense of unexpected events, to bounce back after threats or risks materialize, and to adapt to new circumstances (Starbuck & Farjoun, 2005). However, knowledge is also embedded in the learning networks that span across organizational boundaries (Knight, 2002). Granovetter (1985) suggests organizations are "so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding" (p. 482). For example, strong ties characterized as a high degree of trust and reciprocity among its members lead to decreased embeddedness, while weak ties characterized by more fragmented and diverse connections lead to increased embeddedness.

Beckman et al., (2004) sought to understand the relationship between uncertainty and external network partner selection through an examination of boundary spanning activities. Arguing that an organization with "firm-specific uncertainty" selects its

network partners differently by searching for new partners (i.e. strangers) from a firm that is a member of a larger group facing "collective uncertainty" by focusing on existing partners (i.e. friends). Searching for new partners (increasing embeddedness through weak ties) is a form of exploration. An increase in uncertainty found in the relationships of new partners is likely to be offset by the requisite variety (Ashby, 1956) found in the "benefits of diversification, which should reduce other forms of uncertainty, like technical uncertainty and uncertainty found in major internal changes" (Beckman et al., 2004, p. 261). Understanding the tension of enacting simultaneously increased and decreased embeddedness compliments the research agenda proposed in this paper.

Opportunity Tension

Opportunity tension increases as the environment places pressure on the system to change. Tension provides the system with energy. Think of the analogy of a rubber band. As the band expands, it creates more and more tension and, thus, builds up energy to take some sort of action (i.e. thrusting forward or snapping backwards). This concept of tensions is found in "social theories such as dialectic theory (Marx, 1883), conflict theory (Weber, 1920), the theory of action (Parsons, 1979), hierarchy of needs theory (Maslow, 1943), contingency theory (Lawrence and Lorsch, 1967) cybernetic theory (Ashby, 1960), population ecology theory (Hannan and Freeman, 1977), and resource dependence theory (Pfeffer and Salanick, 1978)...[and] have all dealt with the role that tension play in motivating and driving agent action within larger systems "(Wasden, 2010, p. 6).

Adaptive tension is a necessary condition to enact social change (Buckley, 1968) McKelvey & Han, in press). Adaptive tension between explorative and exploitative

innovation enables a co-evolving dynamic of organizational structuring activities in a complex adaptive system (Gupta et al., 2006; He & Wong, 2004; Holmqvist, 2009; Kim & Rhee, 2009; March, 1991). Exploratory innovation is characterized as the pursuit of "new knowledge and the resulting products and services for emerging customers and markets" (Jansen et al., 2009, p. 5). Exploitative innovation is described through the efficiencies found in using "existing knowledge resources and extend existing products and services for current markets" (Jansen et al., 2009, p. 5). This exploration-exploitation adaptive tension, found in organizational structuring processes, governs the enactment of social innovations. Therefore, in social entrepreneurial organizations adaptive tension emerges and demands that the organizations cyclically divide limited resources (i.e. recombine) (Thomas, Kaminksa-Labbe, & McKelvey, 2005).

Moreover, Hazy (2010) suggests, "opportunity tension implies that the environment places a sort of pressure on individuals to organize other people, resources, and technology in collective action to enact innovations which test the boundaries and potentials of the problem or opportunity" (2010). Increasing opportunity tension creates a condition where emergent network structuring occurs so the system can organize around a new attractor.

In Wasden's (2010) taxonomy of "tensions" he finds that tension can be understood through the elements associated with sensemaking, structuration, and complexity.

Table 2 Wasden's Framework for Examining Tension

Theoretical Framework Common Elements

Theories of framework	Three tension processes	Three tension principles	Three levels of primary focus
Sensemaking	Inter-subjective	Schemas	
	Generic-subjective	Scripts	
	Extra-subjective	Cues	Micro - agent
	6-8-0-2-8-0-3-8-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		Meso -
Structuration	Signification	Structure	organization or
	Domination	Practice	institution
	Legitimation	Action	Macro - system
Complexity	Variation	Structure	
	Selection	Strategies	
	Interaction	Action	

Tensions can be understood through processes, principles, and levels of focus or analysis. The tensions associated with structuration will be most informative to this research, as it will help examine the conditions through which network structuring occurs as the organization deals with the duality of social structure. Tension comes in the form of competing values, which are manifest in interpretive schemas (structures of signification), normative expectations (structures of legitimation) and capacity to mobilize authority and resources (structures of domination) (Giddens, 1984; Greenhalgh & Stones, 2010).

For social entrepreneurs, the modalities of structuration effect how they see the problem as a collective and the action they will take to create social change. A network of social entrepreneurs will negotiate tension by creating a common language and set of practices, which will be learned and used by the network. In addition, this network regulates the tension between power relationships (domination) such that network members decide how resources will be recombined. Lastly, the network navigates the tensions by encoding rules of moral and ethical behaviors (legitimation) that govern their

action. Through this process of working through tensions, a network of social entrepreneurs co-constructs a shared sense of the social value.

The tension found in these modalities can be examined as attractors competing with one another in a complex adaptive system. Tension provides the energy necessary to sustain the system and create emergent network structures around a shared sense of social value. Competing values can be found in the schemata of the system. These schemata are reflections of the attractors, which move the system toward varying forms of emergent network structures, and consequently effect the creation of social innovation.

Structuration

Structuration theory (Giddens, 1984) examines the duality of social structures—
"the ways in which knowledgeable agents draw on rules and resources in constituting and reconstituting the social structures that both enable and constrain" (Kilduff, Tsai, & Hanke, 2006). This can be extended to methods that explicate the social structures that affect exploration and exploitation for the purpose of social innovation. This research examined the dynamics associated with that kind of journey into socially conscious innovation. Giddens (1984) identifies three modalities in social systems:

- Signification: produces meaning through interpretive schemes manifest in communications
- Legitimation: produces meaning through societal norms manifest in sanctions
- Domination: produces meaning through the facility of resources manifest in power

These three types of structures can be studied as frames for the initial and boundary conditions that drive how the network structures itself to solve problems in the future. "Emergence happens in complex systems in part, because they are sensitive to

initial conditions; that is, a small fluctuation in one part of the system can bring unexpected changes to other parts of the system" (Plowman et al., 2007). Lorenz (1963) explicates this idea in his story of a butterfly flapping its wings in one part of the world creating a storm in another part of the world. Social innovations can be created through small "tipping points" (Gladwell, 2000) that over time change the nature of the structure altogether. In turn, these new structures give knowledgeable agents the capability to make sense in new and formative ways.

The initial conditions for how we are organized can have implications for how (and at what speed) new social innovations are created. Research suggests "a balance between too much and too little structure is critical to high performance for organizations in dynamic environment (Davis, Eisenhardt, & Bingham, 2009, p. 413). Thus, how the networks that have co-evolved, emerged, and been enacted over points in time will add explanatory power to how to generate and sustain social innovation.

Structuration and Emergence of Social Structures

I use the complimentary language of both structuration theory and complexity theory to describe the dimensions of the context and contextual elements of the case. Structuration theory and strong structuration theory are conceptually congruent with the theory for complex adaptive social systems (Schwandt & Szabla, 2013). This research builds on this proposition.

The purpose of combining the language of structuration and complexity is to examine the phenomenon of social entrepreneurship networks from both a course-grained and fine-grained perspective. "The ongoing reciprocating dynamic aspects of find-grained human interactions are seen is an indirect causal relation with course-grained

attractors resulting in social order" Shwandt and Szabla, 2013, p. 14). Therefore, both theories provided explanatory language necessary to describe the conditions (i.e. course-grained structures like "meaning") and mechanisms (i.e. fine-grained human agency) at play in the structuring process of a social entrepreneurship network.

The terminology is different, but the way in which they both deal with tension, duality of social structure, and interactions between course and fine-grained structures are very similar.

Structuration theory provides the parameters by which we can study the emergence of new attractors in the system. For example, the interpretive schemata for an organization can act as an attractor for values and norms of the organization. An attractor attracts behavior, such as people, events, rituals and communities. The figure below explains how an original attractor, say "profit" is overtaken by an emergent attractor, say "social good" whereby an entirely new network structure can form.

Figure 6 The emergence of new attractors

Panel 1	Panel 2	Panel 3	Panel 4	Panel 5
Initial attractor	Beginning of a new attractor	Two attractors are in conflict	New attractor displaces the old attractor	New Attractor dominates
A1	A1/	A2 \A1	A2 A1	A2
W	ave of Change			

According to Goldstein, et al., (2010), "the process of social entrepreneurship can be thought of as a 'wave of change' within social networks that sweeps through the community from left (the old way) to right (a new way) as differences in perspective are recognized, appreciated, explored and synthesized into a social innovation that organizes human activity in a new way." (p. 7). For social innovations to be sustained the encouragement of new network connections will form emergent and novel social network structures required to sustain the innovation.

The emergence of co-evolving and self-organized social structures creates systemic patterns of connections among agents (i.e. social networks) in an organization. If we can understand how (i.e. governing rules and patterns) people relate, we can simulate (like in fractal generation mathematics) thousands of micro-interactions between agents in a complex organizational system. This helps to understand how organizational structures will emerge from the patterns of interactions. The literature in complexity and social networks explains how social innovation is affected by the networks that have co-evolved, emerged, and been enacted over points in time in an organization. Granovetter (1985) argues that an organization tends to be embedded in multiple, complex social relationships with other organizations throughout its environment.

Social network theory

In order to understand the emergence of social value, I have turned to the research in social networks. Social network theory (Burt, 1995; Cross & Parker, 2004; Granovetter, 1973) provides a means by which we can examine the nature of organizations in terms of the interactions of agents with other agents in a system. Social network research "can capture complexity and distinctiveness of individuals and networks in terms of mutual constitution and change" (Kilduff, 2006, p. 1038). Social network analysis of complexity of ties, density, connectedness, and embeddedness

provide opportunities to investigate the network tensions that effect exploration of new innovations and exploitation of existing innovations (Scott, 2000). Therefore, the interconnections of people in the social networks will help to define the "organizations" that are under study in this research. In networks, we do not need to "convince large numbers of people to change; instead, we need to connect with kindred spirits. Through these relationships, we will develop the new knowledge, practices, courage and commitment that lead to broad-based change" (Wheatley & Frieze, 2006, p. 1)

Moreover, network theory helps us to understand how organizations enact networks over time to make collective sense of the ambiguity found in social entrepreneurship. Understanding how "events may occur within and/or give rise to emergent nodes in a social network" (Ibarra, et al., 2005, p. 359) will help explain how social innovation takes hold and changes the entire system. Such an approach presents a unique addition to research on networks, by "exploring how and when certain nodes may be highly leveraged within a collective social system. Moreover, by exploring influential nodes...rather than in terms of the individualized roles these nodes provide...a new way to explain the role of individual action in the enactment of structures of constraint and opportunity" (Lichtenstein et al., 2006). The emergence of co-evolving and self-organized social structures creates systemic patterns of connections among agents (i.e. social networks) in an organization. ²

² The evolution of networks can be examined using dynamic network analysis (DNA), which considers time and multiplex networks. DNA is advancing traditional social network analysis (SNA) by the idea that networks evolve and change over time (Carley, 2003)

Network forms

According to Wellman (1992), the most direct way to study a social structure is to analyze the patterns of ties linking its members. Network analysts search for deep structures and regular network patterns beneath the often-complex surface of social systems. They attempt to describe these patterns and then use their descriptions to learn how network structures constrain social behavior and social change. The social network approach can test "whether the pattern of network ties in a particular social world is related to other important patterns" (Kilduff & Tsai, 2003). A clearer understanding of this phenomenon and the two networks of the case study sites will aid the leadership of these organizations in maximizing their social capital.

Using existing conceptualizations of social networks --strong/weak (Granovetter, 1983) and tight/loose (Orton & Weick, 1990)-- I examined *how* and *under what conditions* social networks emerge and self-organize *(over time)* in order to create new knowledge (or innovate). More specifically, I will examine how do these networks emerge to address social issues (i.e. healthcare, environment, poverty, etc.)?

Methods for Studying Social Value Networks

The study of the interactions among agents can be accomplished through case study, modeling of agents, and through social network analysis. I turn my attention to these methods to get a better sense of the available tools to carry out this research.

Organizational network research "can capture complexity and distinctiveness of individuals and networks in terms of mutual constitution and change" (Kilduff et al., 2006, p. 1038). Social network analysis of complexity of ties, density, connectedness,

and embeddedness provide opportunities to investigate the network tensions that affect exploration and exploitation (Scott, 2000). However, limitations exist in data collection and analysis of network data. Therefore, researchers (Lazer & Friedman, 2007; Tivnan, 2006) have used agent-based modeling to examine the network structures that affect the balance between exploration and exploitation. These techniques provide a vehicle for understanding the tensions of social structuring for the purposes of explorative and exploitive innovation³. However, future research could use more qualitative approaches (case studies) to examine how agents make meaning of the tension found in the network connections. For example, Anderson, Crabtree, Steele, and McDaniel (2005) coupled complexity theory with case study methods as a way of "studying systems as an integrated whole" in the healthcare industry (p. 669). In their research, they define the attributes of studying an integrated system. The attributes include: understanding interdependences, being sensitive to dimensions of relationships, focusing on nonlinearities, looking for the unexpected, examining unexpected events, focusing on processes as well as events, recognizing dynamics, describing patterns as well as events, seeing patterns across levels, understanding the patterns of change, shifting foreground and background, and redefining the observers roles, and learning the systems history (Anderson et al., 2005). They suggest that "complexity theory is a useful companion to case study because it simultaneously fosters an attitude of attention to emerging patterns, dynamism, and comprehensiveness while focusing attention on defined system properties" (Anderson et al., 2005, p. 10).

³ A comprehensive review of network research in organizational theory is provided by Borgatti and Foster (2003).

Conclusion

An organization's ability to adapt to the environment "varies with the quality of social ties, the structure of the organization network, and an organization structural position in the network" (Uzzi, 1997, p. 35). This investigation pulled together two emerging theoretical frameworks of social entrepreneurship and complexity science in order to improve our understanding of the complex structuring dynamics that are enacted in organizations. The aim was to elucidate how the dynamics of social networks improve the explanatory power of organizational theorists treatment of the complex dynamics of social innovation. To that end, this paper contributes to theory by examining how the initial conditions create the attractors that setup the network structures, which enable or constrain sustainable social innovation.

In this chapter, I provided a review of the tensions found in organizational exploration and exploitation. I synthesized past research that focuses on the affect social network structures have on working through adaptive tension. I coupled complexity science and structuration to understand how social innovations emerge. Finally, I examined possible research designs for studying this conceptual framework. This investigation will help researchers understand how social structures in organizations emerge in the form of novel network structures. Examining the nature and dynamics of these network structures will help organizational scientists explain how social innovations can be sustained.

The framework presented in this research will examine how interacting agents with co-evolving networks are self-organizing in unpredictable ways. Adaptive tensions create a far-from-equilibrium state, where novel network structures can emerge around a

new shared sense of social value. This creates a scenario whereby entirely new and innovative responses are enacted for problems that are not rational, and inherently complex. However, it is in the emergent novel networks that the seeds of social innovation are nurtured, co-evolved, and sustained.

This research examined the dynamics of opportunity tension and the co-evolving agents that create self-organized and emergent network structures. Through interpretive schemas that act as attractors in the system, we can extend our understanding of social entrepreneurship. The key to understanding the networks dynamics found in complex adaptive systems is in the study of the interactions and relationships among the agents in the system. The conditions setup the boundaries for which the actors in the system self-organize and at a bifurcation point change the very nature of the social structure. Understanding the process of enacting new social structures can help better understand how social innovations can be scaled in the future.

Chapter 3: Methodology and Design

Overview

This Chapter begins with an overview of the study design. It is followed by a brief discussion of the opportunities and challenges for understanding the context, conditions, and mechanisms in social entrepreneurship networks that enable the scaling of social value. Chapter 3 concludes with a consideration of the study's trustworthiness, limitations, assumptions, and the human and ethical considerations that are posed by the research. The research design presented in this chapter will use a case study approach in order to further develop theory for social innovation through an examination of the interactions of agents in a social entrepreneurship network.

Research Design

This research used a case study design to develop a view of social innovation that gives a central role to the complexity of the interactions between agents in the system.

Crutchfield (1994) suggests: "Defining structure and detecting the emergence of complexity in nature are inherently subjective, though essential, scientific activities" (p. 1). A case study approach garners a deeper understanding of the conditions of emergent networks over time.

Yin (2008) defines a case study as an empirical inquiry that "investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p.13). This approach is appropriate with social entrepreneurship research because the phenomenon has loosely defined boundaries. Researchers suggest that a case study requires "careful justification of theory building, theoretical sampling of cases, interviews that limit informant bias, rich

presentation of evidence in tables and appendixes, and clear statement of theoretical arguments" (Eisenhardt & Graebner, 2007, p. 30). Based on the conceptual framework, the nature of the research questions, and the need for theory building in social entrepreneurship, I have selected a case study that uses structuration and complexity theories to explain the emergence of novel social networks for the purpose of enacting social innovation.

This research approach is consistent with case studies using structuration theory's duality of social structures (Giddens, 1984) to examine the creation of institutionalized social structures, which provide guidelines for action (Barley & Tolbert, 1997; Greenhalgh & Stones, 2010; Jack & Kholeif, 2007; Jarzabkowski, 2008; Orlikowski, 2000). In addition, it is consistent with case studies using complexity theory to understand patterns of relationships and interactions among agents in a system (Anderson, Crabtree, Steele, & McDaniel, 2005). Moreover, it is informed by research combining social capital and social entrepreneurship (Antico-Majkowski, 2010).

Anderson suggests, "the case study approach provides us with a strategy for studying integrated systems. Complexity theory is a useful companion to case study because it simultaneously fosters an attitude of attention to emerging patterns, dynamism, and comprehensiveness while focusing attention on defined system properties" (Anderson et al., 2005, p. 10). The case method is appropriate for the study of complex systems because it enables the researcher to move beyond an existing theoretical framework by "filling in what has been left out" (Locke, 2001, p. 103). Cases enforce a greater need of flexibility in a model to explain a phenomenon from multiple agents and perspectives. Trustworthiness will be improved by using multiple sources of data

gathering including open-ended interviews with the social enterprise participants, observation of the participants, and publicly available information, including published articles, social media data, and government reports. In addition, a more robust model of social entrepreneurship will be required because it will have to fit into multiple iterations of examination.

Unlike deductive research methods, referred to as "normal science research" (Eisenhardt, 1989, p. 549), case research methodology still has yet to gain universally accepted procedures. Eisenhardt (1989) suggests that it should "begin as close as possible to the ideal of no theory under consideration and no hypotheses to test" (p. 536). Yin (2003) argues that a review of the relevant literature and generation of hypotheses should occur a priori. Because the limited understanding of the nature of social entrepreneurship, I will try not to be biased by current theory and hypotheses as suggested by Glaser and Strauss (Glaser & Strauss, 1967). However, I will bring to the study particular theories of social action (structuration and complexity) in order to focus the research on the study's purpose.

Methodology

The methodology presented here will attempt to create measures of the meaning of shared social value inside the social entrepreneurship networks. Using my conceptual framework, I collected data in order to understand the conditions and mechanisms that enable organizing for the purpose of enacting social innovation. The data collection took the form of narratives and stories of members involved in a social entrepreneurship network. Using qualitative interview and narrative data overlaid with a self-signification process, I asked questions related to the nature and conditions of how they joined the

social entrepreneurship network. The process included collecting narratives through interviews or questionnaires and document collection for participants.

Element of Time

The purpose is to gather data using a temporal component to examine the drift of conditions and action-oriented mechanisms over time. The element of time well help to understand social entrepreneurship networks at three natural times:

- 1. Early recruits (early involvement in the networks), where there is a recognized need to organize or "be involved" in the Social Entrepreneurship Network (SEN).
- 2. Involved entrepreneurs (incubator stage), where knowledge and resources are collectively shared and shared meaning is being created in the SEN.
- 3. Post-incubation involvement (graduations and/or success stage), where social entrepreneurs contribute back and/or graduate the SEN.

Each of the social entrepreneurs with whom I engaged were involved in one of three time periods in the incubation of their business and association with the social entrepreneurship network.

Institutional and Action Realms of Analysis

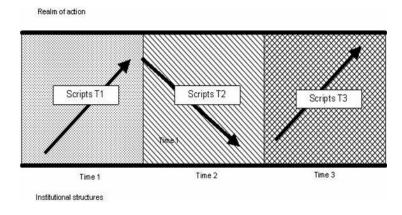
To understand the structuring process at the institutional and action realms, I used structuration theory as an empirical basis for understanding the conditions that enable social entrepreneurship networks to organize.

Jarzabkowski (2008) notes,

One problem with using structuration theory empirically is that, despite it's being a processual theory, Giddens (1984) presented the concepts synchronically, as simultaneous reciprocity between action and institutions, making it difficult to analyze how actions reproduce or modify institutions over time. (p. 623)

Therefore, this research followed Barley's (1997)'s diachronic model found in Figure 7.

Figure 7 Method for examining the dualities of structure



(Adapted from Barley and Tolbert, 1997)

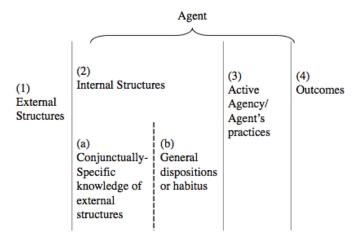
Using this model, I "bracket[ed] the action and institutional realms into different time periods in order to analyze sequential shifts between the two" (Jarzabkowski, 2008, p. 623). This method is used empirically by structuration and process researchers attempting to understand change over time {Barley, 1997; de Sanctis & Poole, 1994; Langley, 1999; Orlikowski, 2001; Pozzebon & Pinsonneault, 2005).

Using Barley and Tolbert's (1997) conceptualization of this complex process, which Giddens (1984) termed "distanciation," my intent was to collect data through narrative-based critical incidents (Flanagan, 1954) on how new actions can affect the creation of new and novel institutional structures. This study is informed by the research protocol from the recent structuration study by Jarzabkowski (2008).

Empiricism through Structuration

The quadripartite nature of structuration found by Stones (2005) was used as a framework for analysis of the empirical material (see Figure 8).

Figure 8 Stone's strong structuration framework



Source: Stones (2005, p.85)

Stones (2005) strong structuration theory enables researchers to empirically examine the quadripartite nature of structure and agency (Greenhalgh & Stones, 2010, p. 85) through "position-practices". This approach considers the following conditions:

- External social structures (conditions for action)
- Internal social structures (agents' capabilities and what they "know" about the social world)
- Active agency and actions
- Outcomes as they feedback on the position-practice network

External social structures can be studied from the perspective of institutional and environmental factors, which create conditions for action and "may be the basis for unintended consequences of action" (Stones, 2005, p. 109). The conditions may constrain or enable action by the agents.

The role of individual intentional actions or agency can be examined from the perspective of *internal social structures* (conjuctually-specific knowledge of external structure and general dispositions or "habitus"). Conjuctually-specific knowledge relates to the role or position occupied by an agent or cluster of agents (Stones, 2005, p. 89). Understanding the nature of norms and resources available to the agent that provides them power or the ability to sanction certain activities will be studied.

General disposition is something the agent draws on without thinking like the interpretive schemas of "..transposable skills and dispositions, including generalized world-views and cultural schemas, classifications, typifications of things, peoples and networks, principles of action, typified recipes of action, deep binary frameworks of signification, an associative chains and connotations of discourse, habits of speech and gesture, and methodologies for adapting this range of particular practices in particular locations in time and space" (Stones 2005, p. 88). In this study, one important general disposition is the agent's "tertius iungens" strategic orientation or the degree to which the use of a "combining" strategy of connecting people in lieu of a "tertius gaudens" strategic orientation focused on creating power.

Active agency or the agent's practices was examined through the behaviors or actions that the social entrepreneurship networks members took in order to affect an outcome. The process is in the "active, dynamic moment of structuration" when an agent in focus acts (Stones, 2005, p. 86).

Understanding the external and internal social structures leads to outcomes, which are the result of active agency. The outcome can be that structures may be "changed or preserved, consequences may be intended or unintended, and the agent may be facilitated

or frustrated" (Stones, 2005, p. 85). This framework was used to analyze the empirical data discussed in the research protocol.

Research Ouestions and Measurements

The purpose of the case study is to examine through the framework presented in this research how and under what requisite conditions social entrepreneurship networks are enacted. This research examined the contexts and mechanisms that affected the emergence of a social entrepreneurship over time. Equally important to the emergence of these networks is how through these networks social entrepreneurs scale social change initiatives. This research used interviews of a network of entrepreneurs who are engaged in this process. In addition, a short questionnaire was used to collect stories from the interviews through micro-narratives to understand the conditions, contexts, and mechanisms associated with social entrepreneurship networks. The entrepreneur participants rated their stories on a combining strategic orientation scale. This helped examine how agents' dispositions affected their involvement in the social entrepreneurship network.

Research Questions

The nature of the problem, which currently lacks sufficient theory, required a methodology that can develop a theory of innovation that makes sense in the context of social entrepreneurship. The conceptual framework (Figure 2) predicated the research questions that were investigated in this study. In order to understand how social entrepreneurship works, I asked the following research questions with associated variables, patterns, and measures (Table 3). The specific data collection methods and analysis techniques are described in the subsequent section, research protocols

Table 3 Research Questions and Design

	What			How	
Research Questions	Macro-variables	Object of Study	Patterns Expected	Collection Method	Analytical Method
1. What are the context and conditions associated with social entrepreneurship networks?	Context and Conditions: Constraints and influences imposed upon particular agents by external structures Mechanisms: Small pieces of theory that specify how a specific input will reliably create a specific output	External structural clusters		Document analysis	Abductive analysis of the range of qualitative data and schemata: To examine the rules, norms, behaviors, and etiquettes of social entrepreneurship network formation including: Worldviews (interpretive schemas) Competing values (Resources) Personal efficacies (Norms)
1a. How do these context and conditions relate to opportunity tension?		Conjuncturally- specific internal structures	Opportunity tension	In-depth interviews	
1b. How do these context and conditions relate to informational differences?		Conjuncturally- specific internal structures	Informational differences		
1c. How do these context and conditions relate to strategic behavioral orientation?		General dispositional frames of agent	Tertius iungens strategic orientation	Self-signified interview-narratives	
2. What are the social and interaction-oriented mechanisms associated with social entrepreneurship networks?		Active agency	Coordination of resources and knowledge	Participant observation	
2a. How do these mechanisms relate to the recombination of knowledge and resources?		Active recombination of knowledge and resources	Ordering of various projects on the basis of	Social media- records In-depth interviews	
2b. How do these mechanisms relate to a shared meaning of social value?		Shared values, norms, and meanings	perceptions of conjunctural structures		

Patterns and Measures

In this section, I discuss the patterns, variables, and measures used to examine each research question in this study. The first research question asks, "What are the context and conditions that enable the creation of social entrepreneurship networks?" Context and conditions are patterns of interactions between the external environment and the internal environment. Through the propositions presented in this paper, the context can create requisite conditions where opportunity tension exists from the informational differences found inside and outside the network. Using observation, open-ended interviews (including micro-narratives), I asked the entrepreneurs selected in this study, about the internal and external conditions that enabled a coordinated or collective action to organize into a network focused on social change.

Measures of Opportunity tension

Next, I examined how these contexts and conditions related to opportunity tension. Using interviews, extant data, and observation, I identified external and internal pressures present that created the need to join the network. I asked social entrepreneurs to tell stories about how they perceive the current organizing structures for social innovation. Are they inadequate to address current market problems or to take advantage of market opportunities? Do they feel motivated to organize resources and others to capitalize on the opportunity? Hazy (2010) suggests that below a certain threshold of opportunity tension "no innovation or new entrepreneurial ventures will emerge" (p. 34). I will seek to qualitatively identify that threshold.

Measures of Informational differences

In addition, I examined how these context and conditions related to informational differences. Informational differences are measured by "how deeply individuals

recognize that there are others that feel the same way and have different perspectives that need to be explored and understood" (Hazy, 2010, p. 35). "There is greater homogeneity inside groups of people than between groups of people" (Burt, 2004). Groups of people form around a context. The concept of homophily, or birds of a feather flock together, suggests that people seek out others who are similar to them and with those whom they have similar or shared contexts (McPherson et al., 2001). The consequences of homogeneity suggest that there is need to bridge structural holes to bring ideas together from one group to another (Burt, 2004). Using interview narratives and observation, I examined the differences in experiences (education, business, culture, etc.) that created opportunities for innovation. Again, I sought to identify a qualitative threshold point above which social innovation can occur.

Measures of Network Orientation

In addition, I examined how these mechanisms relate to a tertius iungens strategic orientation through self-signified questions. A "tertius iungens orientation is a strategic, behavioral orientation toward connecting people in one's social network by either introducing disconnected individuals or facilitating new coordination between connected individuals (Obstfeld, 2005, p. 103). Tertius iungens may play an important mediating role between the requisite conditions and the mechanisms needed to recombine knowledge and resources in order to enable large-scale collective action toward social change.

Structural holes create opportunities for innovation, but challenges for action (Burt, 2004). Obstfeld suggests, "the action problem associated with structural holes and the idea problem associated with dense networks raises a fundamental question about the true antecedents of innovation in the broad array of settings in which innovation necessarily involves the combination of people and ideas (Obstfeld, 2005, pp. 101-102).

This research investigated how peoples' bridging actions in a network relate to the antecedents and consequences of coordinated collective action toward a common goal in a social entrepreneurship network.

Measures of Recombinatory Mechanisms

Through the processes above, this research sought to uncover the conditions that enable the creation of social entrepreneurship networks. When these requisite conditions are met, the mechanisms associated with social entrepreneurship networks are able to support a process toward collective action. More specifically this research examined, how do these mechanisms relate to the recombination of knowledge and resources? Consistent with Schumpeter's (2005) perspective on combination, "the organizational and strategy literature has emphasized the combination and recombination of knowledge. In this view, a firm's capacity to integrate knowledge represents a critical competitive advantage (Kogut and Zander, 1992; Grant, 1996; Spender, 1996; Nahapiet and Ghoshal, 1998; Okhuysen and Eisenhardt, 2002; Hargadon, 2003)" (p. 107). I asked the social entrepreneurship participants about their roles (e.g. employer, employee, manager, union official, etc.) and their actions (e.g. negotiation, obedience, loyalty, equitable exchange) as they relate to recombining knowledge and resources (Weber & Glynn, 2006). I asked study participants the degree to which they share knowledge and resources inside and outside the social entrepreneurship network. This investigation will help examine how they coordinate their resources through their network.

Coordination

To understand this, we assume that the requisite context exists after which the network begins recombining knowledge and resources. However, the extent to which this recombination can be scaled to enact social change must be understood in the context of the cooperative infrastructure found in the network. It is important to understand the

number of people participating in the network and the frequency of participation. Using event participation records I examine the degree to which they are able to take advantage of their ability to scale –or coordinate their action—through their network.

Shared Social Value

Lastly, I examined how participants in a social entrepreneurship network create a shared social value inside the network? Using the data from the interviews, observations, self-signified micro-narratives, and network maps, I attempted to understand how (and at what points) meaning is created around the purpose and function of the social entrepreneurship network. The analysis of the themes at the various points in time and under certain conditions, attempted to uncover: At what point (if any) does that meaning create a shared social value? Does a shared social value create enabling or constraining conditions for scaling social innovation through the knowledge and resources inside the network? The meaning created by the collective may be an important factor in the enactment of the network and scalability of the social enterprises the network enables.

Research Protocol and Data Collection

A research protocol is important to establish and follow in case study research in order to establish credibility (Yin, 2003). The research protocol for this case study included the elements of observation, interviews, self-signified narratives, and archival records.

Data collection progressed as follows: First, preliminary interviews with key informants in the social entrepreneurship network identified current and past strategies for developing the network. I used multiple documentary sources, such as archives, meeting minutes, calendars, memos, and blogs, to validate and extend this identification,

constructing a detailed history and context. The case history and context was the basis for more extensive interviews with curators of the social entrepreneurship network, members of the social entrepreneurship network, and other key individuals. Interviews helped to understand the past and current conditions and mechanisms that enable their participation in the social entrepreneurship network. In addition, I used a short set of questions to understand their strategic behavioral orientation (i.e. tertius iungens) toward connecting others inside a network.

The action-oriented components of the interviews, combined with nonparticipant observation of meetings, events, shadowing, and other on-site observational data, enabled me to explore strategizing behaviors and processes as they unfolded. Interview and observational data contextualized and deepened my understanding of the case history and extant data. The interview transcriptions, questionnaire responses, field notes, and extant documentation comprise the full data set for analysis. This use of multiple data sources, combined with prolonged engagement in the field enhanced the trustworthiness of the data set (Lincoln & Guba, 1985).

Observations

There were certain key events in which members of the social entrepreneurship network participated throughout the research period. As an observer of these events, the researcher studied the interaction between interviewees. Observation of the network "insitu" or in the context of the social entrepreneurship network helped create a better understanding of both the internal and external structures that create the conditions for action. These structures can be difficult to articulate in words; therefore observation helped me to ask more probing questions based on witnessing their actions in meetings,

workshops, training events, and social events. I attended five events over the course of a four month period.

Interviews

Interviews with members of a social entrepreneurship network were intended to reveal how agents in the system interact with each other and in particular the role internal social structures and active agency played in their interactions. I used a semi-structured interview approach that focused on collecting stories from individuals in the social entrepreneurship network. The stories were open-ended with a few directions: "Tell me the story of *how* you became involved in this social entrepreneurship. What was your role? With whom were you connected as a result?" I followed-up with a few probing questions including⁴:

- What is the purpose or vision for the social entrepreneurship network with which you are involved?
- Why did you join?
- What tensions were working through/overcoming/living with in the process?
- Was joining part of an overall strategy or a place to meet others, which may lead to outcomes not expected or intended?
- What do you enjoy most about the network? (Probes: diversity of information and knowledge, resources, meeting new people, sharing ideas)
- To what degree are you supported through the sharing and combining of resources and knowledge?

At the end of the interview, I administered a self-signified micro-narrative questionnaire, which was administered in two parts. The first part asked respondents to

⁴ Full interview protocol is included in Appendix A.

tell a story about their involvement with their social entrepreneurship network (see Appendix B). Secondly, I measured the tertius iungens strategic orientation (a general disposition) related to the story. The questionnaire was administered to each of the interviewed participants.

After they entered the story, they were asked some questions about what the story means. I used a 7-point scale to capture the degree to which there is "a predisposition to bring people together in collaboration, including introducing disconnected others and forging stronger ties between others who may already have ties with one another" (Obstfeld, 2005). The six-item scale contained the following items:

- 1. I introduce people to each other who might have a common strategic work interest
- 2. I try to describe an issue in a way that appeals to a diverse set of interests
- 3. I see opportunities for collaboration between people
- 4. I point out the common ground shared by people who have different perspectives on an issue
- 5. I introduce two people when I think they might benefit from becoming acquainted
- 6. I forge connections between different people dealing with a particular issue

This scale has been tested for reliability and validity. It had a reliability (Cronbach alpha) of .88 in a previous study of tertius iungens strategic orientation on innovation involvement (Obstfeld, 2005). It has discriminant validity against common proactive personality scales.

The purpose of the interviews and self-signified micro-narrative stories was to gather particular actions in particular local situations to understand which elements of

internal structures the agents draw on? How do they do this – and why? In addition, it helped examine the "external structures and conditions of action (i.e. the structural context) in which action is contemplated and takes place, including meso and macro levels of position-practice relations. Lastly, I examined what were the intended and unintended outcomes on external and internal structures, and how were these reproduced or changed?" (Jack & Kholeif, 2007)

The interviews and narratives are similar to collecting scripts (Barley & Tolbert, 1997) or behavioral regularities (Jarzabkowski, 2008) in order to understand the conditions under which the emergence of social entrepreneurship networks occur. Using the structuration framework, I was particularly interested in how institutional structures are created (and broken down) through agents' actions and vice versa. The Interviews cited in this research are designated throughout using the following citation (Interview X).

Document Analysis

To complete the qualitative research protocols, several documents were analyzed. These included: strategic plans, social media web sites, business ideas, executive reports, grant applications, membership forms, and newspaper articles. The documents cited in this research are cited in the Appendix and throughout this paper with the designation (Document X). These provided me with both an internal and external view of how the secondary subjects, or the social entrepreneurships, were visualized by the world. These documents further validated the themes and codes that were uncovered during the interviews, micronarratives, and observations.

Systematic Combining: An Abductive Approach to Data Analysis

Ultimately, the process I used in analyzing the data is one consistent with *systematic combining* (Dubois & Gadde, 2002). Systematic combining' is grounded in an 'abductive' logic. Abductive logic allows inferring a as an explanation of b. Because of this inference, abduction allows the precondition to be abduced from the consequence of b (Wikipedia).

Abduction starts from a collection of heterogeneous facts and infers the most plausible pattern that they make – inference to the best explanation (Peirce, 1935). Siggelkow (2007) suggest that abduction is useful when a single case is so unique an extreme outcome – like a 'talking pig' – the attempt at explanation is so compelling that it stands as a telling piece of research even if it is only an N of 1. Boisot (2010) argues that a Pareto approach to understanding complex dynamics can be benefitted using a abductive methods in analyzing cases like triangulation, hermeneutics, and abductive reasoning (Boisot & Mckelvey, 2010)

Firstly, using an inductive approach of analyzing the data, I looked for patterns to emerge that allowed me to infer b from a. These patterns created a set of codes in the data that were not fit a priorii into a pre-defined framework. These codes were maintained throughout the study as sub-codes in the analysis.

Secondly, using a deductive approach of analyzing the data, I retro-fitted my sub-codes into a coherent pattern flowing from the primary themes found in structuration theory—like Legitimation, Signification, and Domination—to describe the data. These were used as master codes that supported logical writing and analysis in a structured form that provided consistency to other studies of human action and reasoning.

Lastly, using an abductive approach in analyzing the data, I developed a systematic matching technique consistent with that described by Dubois (2002). These codes can be found primarily in the "tension schemata codes" that were used to reanalyze the data in Chapter 4. Systematic combining uses a process of 'matching' and 'direction and re-direction'.

Matching

Using the conceptual framework presented in this study, I matched data that helped examine the tensions that were underlying how the social structures emerged.

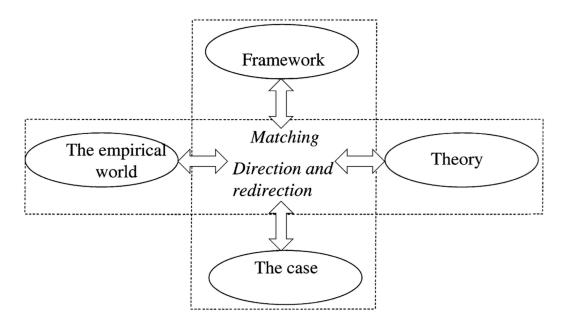
Using the theories of strong structuration and complex adaptive systems, I was able to observe the structuration process from the perspectives of both the context and conditions which focused on the course-grained structures and the mechanisms for actions which could be seen in the fine-grained mechanisms in the case.

Direction and Re-direction

These observations generated new questions on which further lines of inquiry could be based. In addition, the insights that resulted from unanticipated data (like racial tension) contributed to further development of the framework and triggered the search for complementary theoretical concepts (strong structuration). The observations, thus, added new dimensions to the subject, which eventually resulted in a new view of the phenomenon of social entrepreneurship itself.

The process is consistent with Dubois (2002) who describes this in the Figure below.

Figure 9: Dubois' Abductive Systematic Combining Approach



In this systematic combining approach, I matched between theory and reality and dealt with direction and redirection of the study. Firstly, I examined the boundaries of the study by inquiring into what parts of the empirical world should be brought into the case. I did this using a network mapping exercise presented in Chapter 4. I used an analytical framework informed by strong structuration and complex adaptive systems. The role of the analytic framework is different from both induction and deduction. I used a process of successive refinement of concepts that implied that they constitute input, as well as output of the study. This evolving theory and the evolving case reflexively inform each other in this process.

Dubois (2002) suggests:

Learning is the essence of all research. What we learn is articulated in the theoretical framework combined with the matching case. This is generally considered by far the most important outcome of the research process....Learning

takes place in the interplay between search and discovery. Where search is concerned, the current framework is used to guide the research process in a cumulative manner. Discoveries, which cannot be planned in advance, force us to reconsider the prevailing framework. (p. 560)

Intentionally examined the data from deductive, inductive, and abductive approaches, I was able to land on the systematic combining approach which builds more on refinement of existing theories than on inventing new ones. (Dubois & Gadde, 2002)

Data Analysis Plan

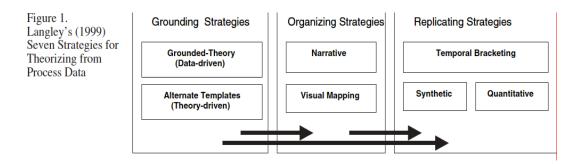
To analyze the data, I used a fine-grain temporal bracketing and narrative strategy to understand the "sensitizing devices" of duality of structure in its relation to time (Pozzebon & Pinsonneault, 2005). Pozzebon analyzed the extant literature on structuration and how researchers have theorized using process data. Using Langley's (Langley, 1999) seven strategies, he found that:

Grounding strategies are either inductive (grounded theory) or deductive (alternate templates), and involve the systematic comparison of data gradually to construct an explanation of an observed phenomenon.

Organizing strategies — narrative and visual mapping — represent two different ways of describing and structuring process data in a systematic form. Replicating strategies — temporal bracketing, quantitative and synthetic — are ways of breaking down the data for replication of theoretical propositions (Pozzebon & Pinsonneault, 2005, p. 1362).

Langley (1999) provides a roadmap for this in the following Figure.

Figure 10 Langley's seven strategies for theorizing from process data



Pozzebon (2005) finds that to study duality of structure and time it is "strongly recommended" to use narrative and temporal bracketing strategies.

According to Langley (1999), "some strategies seem best adapted to the detection of patterns in processes (e.g. visual mapping) whereas others seem more appropriate to examine driving mechanisms (e.g. temporal bracketing) and others are better for analyzing the meaning of the process for the people involved (e.g. narrative)" (p. 707). Using the micro-narrative and interview data, I developed scripts (Jarzabkowski, 2008) to:

- Develop case histories
- Identify Strong structuration themes through a data reduction process
- Identify the action and institutional realms
- Analyze patterns of agent behavior and social innovation outcomes

Using narrative analysis (with the support of AtlasTi), I identified themes to understand how the conditions were setup for these networks to emerge. Emirbayer endorses the use of narrative analysis to understand network patterns (Emirbayer & Goodwin, 1994). In addition, the deep structures through legitimation, signification, and domination created and defined conditions and contexts (Giddens, 1984). Moreover, I

identified themes that help understand how the social entrepreneurs recombined knowledge and resources. Lastly, I examined whether a shared sense of social value is created inside the network. These interpretive schemas were for the purpose of describing the opportunity tension, informational differences, recombinatory mechanisms, and strategic orientations of members of a social entrepreneurship network. The conditions and mechanisms helped understand how and whether coordinated and scalable social action is possible inside a loosely coupled network of social innovators.

Site Selection

The case study was a formal network of entrepreneurs whose focus was a social entrepreneurial initiative. The network emerged to help solve a social problem and did not exist in its present form prior to the engagement in the social problem. In addition, the research site met the criteria for a social entrepreneurship (Antico-Majkowski, 2010):

- Participate in community development
- Combines various forms of capital to assist with solving social ills

In addition, the selected case for this study met the criteria that they were networks of agents focused around a social problem. They needed to participate in the community in order to create a sustainable solution. The network recombined various other networks to assist with solving the social problem. Study participants were told the purpose of the study is "to better understand how social entrepreneurship can be enabled through social networks."

Social Entrepreneurship Incubator

The context for this research is a social entrepreneurship incubator. A community of social innovators is emerging in the southern city in the United States. The catalyst is

an initiative called BullNet, which is creating conditions that enabled social entrepreneurs opportunities to "develop and scale break-through solutions to community challenges" (BullNet web site). The purpose of BullNet is to develop an eco-system where changemakers can thrive. The eco-system is enabled through institutional and social capital in order to create the conditions to "dramatically increase the number of social innovators in [the city] community and help them deepen their economic and social impact" (Document 13).

As a business incubator focused on supporting social entrepreneurs, BullNet's intention is to enable members of the movement by providing a space in which they can share business necessities like accounting, administration, utilities, technical support and other services at their social innovation campus. In addition, BullNet is bringing members of the social entrepreneurial community together, in the form of workshops and networking events hosted by BullNet. This network weaving is designed to encourage communication, collaboration, and a sense of community around their mission of "innovating for the greater good". This context is ripe for empirical research in order to understand the conditions that enable a network of social innovators to create a common sense of social value.

Ethical Considerations

Participants

In qualitative research, samples tend to be purposive, rather than random (Miles & Huberman, 1994). Therefore the target population for this research on networks and social innovation required the identification of an organization where both of site criteria exist. For example, the Gulf Coast oil spill triggered a burst of grassroots social

innovation among volunteers, nonprofit organizations and companies trying to help clean up the mess. Therefore the target population was networks of social entrepreneurs working together to address a social problem facing the world.

To ensure participation and representation, I used a snowball sample to identify the appropriate interviewees. The snowball method is helpful for tracking down "special" populations. Given that the level of analysis for this study is the interactions between agents (i.e. networks of people), saturation was initally difficult to identify. However, I used social network mapping to identify the numbers of strong ties that the agents have and the reciprocation of those ties to identify the boundaries of the network.

The participants were members or founders of organizations that have selforganized around a particular social attractor, like poverty, education, public health, or
clean water. I used a snowball sampling technique to ensure that I identified the agents
and their connections and inter-relationships. The participants were adults who were
employed or have volunteered to support a particular social entrepreneurial initiative.

Participation was completely voluntary; however, members were chosen based on their
connection with other members of the study.

Research Process Trustworthiness, Robustness, and Dependability

This study used a case study method approach. I conducted an initial network mapping exercise to understand the size and scope of the agents in the network. This study used qualitative methods, which employed interviews, micro-narratives, observation, and document analysis.

To ensure trustworthiness, the data collection included retrospective data as well as real time observations, and interviews (Jarzabkowski, 2008). There were key events in

which members of the social network participated throughout the research period. As an observer of these events, I studied the interaction between interviewees. This study collected most of the data during a two-phase process: (i) identifying the network, and (ii) making sense of the conditions that formed that network. The focal points of the data collection were the interviews and micro-narratives.

Lincoln and Guba (1985) asserted that dependability is one of the key means of establishing trustworthiness. According to Morrow (2005), the trustworthiness criteria of dependability states that the "way in which a study is conducted should be consistent across time, researchers and analysis techniques" (p. 252). One way to demonstrate dependability is by means of a dependability audit. Another way is to show consistency across all elements of a research study, including the problem statement, research question, and execution of the research design. For this study, I showed dependability by following the same process of interviewing members of all types of networks. In addition, I conducted member checks to ensure consensual validation and dependability.

This study followed an established research protocol from the recent structuration study by Jarzabkowski (2008), which was published as a lead article in the *Academy of Management Journal*. The criteria set out by Yin (2003) will be used to ensure credibility of the case study research. Construct validity and reliability will stem from the data collection phases. This study will draw upon both structuration and complexity theory during the data collection.

The research enhanced "robustness" and "trustworthiness" by using processes associated with dependability and credibility (1985). First of all, the researcher, through the practice of bracketing, or epoche, set aside pre biases and pre-conceived ideas

(Moustakas, 1994). Moreover, I used a dependability audit that includes consistency in interviews, member checks, and consensual validation. In addition, the researcher enhanced credibility by using methods consistent with my theory and conceptual framework.

Limitations

The limitations of this approach relate to the problem of generality, accuracy, and simplicity (GAS) suggested by Langley (Langley, 1999, p. 706). The Figure below shows the degree to which different strategies affect the GAS.

Figure 11 Sensemaking strategies and accuracy, simplicity, and generality

TABLE 2
Sensemaking Strategies and Accuracy,
Simplicity, and Generality^a

Strategy	Accuracy	Simplicity	Generality
	High	Low	Low
Narrative	Ť		:
Grounded theory	i		
Temporal bracketing			
Visual mapping			
Synthetic strategy			
Quantification			
Computer simulation		- J	. v
	Low	High	High

Using narrative and temporal bracketing I consciously looked to achieve higher accuracy with the consequence of lower simplicity and generality. Future study could use computer simulation (Gottemoeller, 2010; Hazy, 2005; Panzar, 2009; Tivnan, 2006) to examine the complexity of the interactions among agent in a social entrepreneurship, which would increase simplicity and (to an extent) generality.

Conclusion

This research methodology intended to describe the nature of the network of social innovators through the web of connections between actors in the network. In this research, I identified the context and mechanisms that enabled the emergence of social entrepreneurial networks. Through this analysis, I described the opportunity tensions, informational differences, network strategic orientation, action-oriented recombinatory mechanisms, and network characteristics. These descriptions were used to build better understanding of how social entrepreneurship networks are created and scaled.

From the perspective taken in this research study, what the reader will learn are the "conditions"—external (political, economic) and internal (social, technical)— that enable social entrepreneurial actions and outcomes. Readers can understand whether filling "structural holes" through a combining strategy (i.e. recombination of ideas and people) in social entrepreneurial networks, we can better enable and sustain social value creation. Using a strategy focused on recombining people attracted around social innovation, a network can emerge in unpredictable, yet valuable ways. I began with this assumption...if we can capture the conditions and mechanisms that the social innovators have co-constructed with the external environment (like the city), we can explain a new way of planning change in the social entrepreneurial context.

Chapter 4: Analysis and Findings

Overview

Yin (1994, p. 13) defines a case study thus: A case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident. This study used an analytic process informed by strong structuration theory and complexity theory to explore how agents in a social entrepreneurship network describe, experience, characterize, leverage, and harness social tensions through their interactions in order to organize for a collective benefit. The purpose of this analysis is to examine the conditions and mechanisms associated with a network of social entrepreneurs. The primary research questions are:

- 1. What are the contexts and conditions associated with social entrepreneurship networks?
- 2. What are the social interaction mechanisms associated with social entrepreneurship networks?

The structures and practices that were observed through this case study have helped illuminate a better understanding of the complex interactions in social entrepreneurship systems that enable novel solutions to social problems. This research is a descriptive study of human interaction.

The Context

Research Setting

Curated Membership Community: An Inter-Organizational Context

The context for this research is a social entrepreneurship incubator in a mid-size town in the southeastern United States. I will refer to this network as a "curated

membership community". Curated membership communities are an ecosystem approach to organizing people, capital (human, financial, social), and knowledge. Whittemore (2011) says it is "an attempt to create the shared experiences which bring us into contact with those people, giving us access to the amazing world which we can see, if not fully yet grasp". This new way of organizing is about "building relationships and empowering those engaged to spread the message in that same way, in a way that instills commitment in the new members" (Document 9). It is this context where the complex interactions of members, partners, and staff were studied. These interactions were examined through the conditions and mechanisms that support social value creation.

In 2010, BullNet, a social entrepreneurship network (SEN) was founded. The community of social innovators in the city existed but were now being organized around BullNet. BullNet is responsible for creating conditions that provided social entrepreneurs with opportunities to "develop and scale break-through solutions to community challenges" (BullNet web site). The purpose of BullNet is to develop "an eco-system where change-makers can thrive" (Document 13). The eco-system is enabled through institutional and social capital in order to create the conditions to "dramatically increase the number of social innovators in the community and help them deepen their economic and social impact" (2010b).

As a business incubator focused on supporting social entrepreneurs, BullNet's intention is to enable members of the movement by providing a physical space in which they can share business necessities like accounting, administration, utilities, technical support and other services at their social innovation campus located in the center of downtown. In addition, BullNet is designed to bring members of the broader social

entrepreneurial community together, in the form of workshops and networking events hosted by BullNet. This network weaving is designed to encourage communication, collaboration, and a sense of community around their mission of "innovating for the greater good" which is branded on their retail space window at the crossroads of the city center at 101. Main Steet. The BullNet Board of Directors is composed of community leaders from the public and private sectors as well as the local universities and public schools. Identifying a context such as this, where there is a complex set of interactions with the City-County/State government, local universities/public schools, local developers, local business owners, and new entrepreneurs, was necessary for empirical research to further our understanding of the conditions that enable a network of social innovators to create novel solutions to social problems.

Case Selection: A Context for Understanding Social Entrepreneurship Networks

The small-medium sized city afforded an excellent setting for studying the emergence of a new form of organizing –a social entrepreneurship network. First, this case allowed a clear look at the phenomenon of social entrepreneurship networks, yielding a high "signal-to-noise ratio" unencumbered by confounding factors. The city's geographic location in the mid-Atlantic south and its medium size, its specialization around being "an organizing town" throughout its history allowed the researcher to control extraneous variation thus bounding the phenomenon of interest in a tractable manner (Stern & Barley, 1996). While engaged in this study, I was pointed to a website by a Chamber of Commerce research participant which explained what was "special" about the city. It states:

It's been said that entrepreneurship is in the DNA of certain people. After all, it

takes a lot to risk it and start your own company. Entrepreneurship in [this city] is not only in the DNA of certain people but in the fabric of our community's history. From our early days in tobacco and textiles to a bustling Black Wall Street to the rise of [a research park] and biotech, [this city] always been a place where bull-headed entrepreneurs launch and grow successful companies (Document 6).

Data Collection and Sources

Interviews

In this study, I interviewed 24 staff, community members, and partners of BullNet. Staff included the Executive Director, the Director of Operations and Strategy, the Resource Manager, and the Community Manager. Community members included entrepreneurs who were CEO/Owners, Business Partners, and Corporate Responsibility Officers of entrepreneurial ventures based in the city. While most members are in the early-stage start-up of their business, some of the members belonged to established organizations. The businesses were both for-profit and non-profit. Partners included individuals who were members of the Board of Directors, Senior State Government Officials, City Government Officials, local University partners, and private City Development individuals.

At the time of the study, there were approximately 110 members/partners and four full-time staff focused on the BullNet curated member network. I interviewed 20% of the total member/partner population and the entire BullNet staff. The participants included 8 for-profits, 12 non-profits, two educational institutions, and two government officials. A description of the various members' ventures and roles can be found in Table 4. Through

these interviews, I used a maximum variation sampling method, a purposeful sampling strategy aimed to sample for heterogeneity. I selected a small number of units or cases that maximize the diversity relevant to the research question.

Table 4: Description BullNet Staff/Member/Partner Ventures who were interviewed

Relationship to BullNet		Description of Member's Venture and/or Role	Business Classification
Full Time members (pay \$250/mo and use BullNet space for unlimited hours/mo)	1	Nonprofit marketing	For-profit
	2	Teaching Hatian Creole online	For-profit
	3	Democratizing sustainability principles through their certification program and other activities	Non-profit
	4	Exercise band company that promotes fitness and wellness	For-profit
Half Time members (pay \$150/mo and use BullNet space up to 80 hrs/mo)	5	Business services to support Latino entrepreneurs	Non-profit
	6	Financial services to support Latino entrepreneurs	Non-profit
Access members (pay \$75/mo and use BullNet space up to 30hrs/mo)	7	Publisher, creates a line of products that makes learning to read easier for kids	For-profit
	8	Videographer	For-profit
	9	Works with street kids in Ghana to teach them business/life skills while making products out of recycled material	Non-profit
Community members (pay \$25/mo and use all of BullNet resources other than space)	10	Multi-media Company	For-profit
	11	An organization that helps neighbors teach neighbors how to save energy	Non-profit
	12	Financial advisor	For-profit
	13	Local meat distribution company	For-profit
	14	Credit Union to Under-served populations	Non-profit
Partner	15	<the city=""> Chamber of Commerce</the>	City Government
	16	Founding Director and Assistant Sec for Community Development, State Commerce Department	State Government
	17	Downtown redevelopment planning organization	Non-profit
	18	Social Media Company	For-profit
	19	Large Private University	Education
	20	Real Estate Developer	Non-profit
	21	Technical College Small Business Center	Education
BullNet Staff	22	Executive Director	Non-profit
	23	Operations Director	Non-profit
	24	Resource Manager	Non-profit
		Community Manager (see participant 4)	Non-profit

Observations

On-site fieldwork afforded direct exposure to the city's local culture, infrastructure, and natural setting. I attended partner meetings, staff meetings, brown-bag lunches, social gatherings, knowledge exchanges, and a local triple-A baseball game. In doing so, I studied artifacts, pictures, writings, behaviors, and recorded my observations in dated field notes. I observed nine events over the course of the study period. During each observation, I kept detailed notes and reflections in a journal. In these observations, I had prolonged engagement through observation of their co-working space over the course of five (two to three-day long) visits over five months.

Documentation

Lastly, I verified details from the interviews and observations from multiple web sites, the strategic plan, blogs, newspaper articles, member bios, Youtube videos, member products and collateral materials. A listing of the documents reviewed and cited in this dissertation can be found in the Appendix.

Notes on Analysis of Data

Throughout data collection, I applied the constant comparative method to extract and refine coding categories from interviews, field notes, and documents. Following Miles and Huberman (1994), data were coded with "descriptive codes" at three levels. First, "master codes" were attached to denote broad conceptual categories (e.g., ecosystem). Second, "subcodes" were used to denote subsets of the category (e.g., institutional structures like government roles). In addition, "pattern codes" were used to denote relationships between the "descriptive codes" (e.g., government tax policy led to developers being attracted to <The City>). As categories, subcategories, and relationships

emerged, I began comparing this data-driven conceptual framework with my conceptual framework. At that point, I used pattern matching (Yin, 1994), a deductive technique in which patterns observed in data are matched with patterns derived from extant theory. I came to see how closely my data fit such complexity theory concepts as dissipative structures, autocatalytic processes, and recombinatory practices. Thus, the analysis yielded a set of concepts grounded both in theory and in data. Stone's strong structuration theory created a framework for understanding structures and practices in the empirical data collected around conditions and mechanisms, respectively.

The narrative text, portions of which I incorporated in this section of this paper, represents a form of analysis through which I demonstrated linkages between data and theory and describe the critical themes. The codes and data are described in this chapter. As Miles and Huberman (Miles & Huberman, 1994, p. 101) note, the "writing" of such narratives "is analysis." Throughout these discussions the data and analysis will begin to provide insight on the research questions.

Analytical framework

This empirical study of context and conditions using a theory of action perspective has helped define coarse-grained social structures and fine-grained human interaction dynamics (Hazy & Backström, 2014) as sources of nonlinear and unanticipated social outcomes. As a result, I apply (Schwandt & Szabla, 2013) approach using Gidden's (1984) structuration theory to define the dimensions of the coarse-grained social system and Stones' (2005) "strong" structuration theory to the fine-grained social system.

In the subsequent pages, I will analyze the complex adaptive system presented in terms of course grained social structures and fine grained actions and interactions (Schwandt & Szabla, 2013). According to Hazy and Backstrom (Hazy & Backström, 2013), "information is gathered and used in this process which always involves time delays and also introduces the time horizon as an important parameter to inform choice and action" (p. 49).

The course grained social structures are defined by a context of the institutional elements of the systems described through meaning, norms, and power, with an emphasis on the former two. I identified the relevant external structures, and the authority and material resources at their disposal. This was found from an examination of interviews with the partners including government officials, university officials, and city leaders and the documents identified in the Appendix of the study. Coarse-grained levels provide information about the "conditions of existence" of the institution or system as a whole (Mouzelis, 1995). In Chapter 5, I will discuss the degree to which these structures are modifiable by the BullNet network.

Therefore, this study also emphasizes the fine grained social structures through the two internal structures of Stone's structuration framework which provide information and knowledge that we can see used by the agents in the BullNet system in order to choose and form dispositions that will guide them in their actions and interactions and their interpretation of the context. The two internal structures from strong structuration are used as the framework for describing the fine grained social structures (mechanisms) in this research.

I will describe the internal fine-grained structures based on interviews with members in the network focusing on (i) general-dispositional nature and (ii) conjunctural specific knowledge of external structures and modes of implementation. These structures were coded after a broader open coding of the data. Through this analytic tool, the conjuncturally-specific interpretative schemes are described. This will include their perceptions of the external environment and their connections to a 'networked set of others'.

I examine the action-oriented practices of the agents which Stones (2005) calls the "active, dynamic moment of structuration" when an agent in focus acts (p. 86). I describe the actions of participants inside this social entrepreneurship network that were enacted through their knowledgeability of both the internal and external structures using the observations from meetings, office activities, and social gatherings.

Lastly, I examine the intended or unintended outcomes of the structuration processes and the extent to which structures (external and internal) have been modified and the extent to which rules and routines have endured. When the data were analyzed as described above, themes emerged which describe:

- The context and conditions (external structures) found in the system
- The action-oriented mechanisms (internal structures and active agency)

By describing the structures and practices, I delineated potential structured change practices, which then changes structures, through the activities of knowledgeable agents in the system. What follows in Chapter 5 is a description of what has changed in the structure of the system over time as a result of the human interaction dynamics described in this study.

Course Grained Social Structures

In this study I examined the course-grained structures by reviewing the context and conditions of the system over time through the following research question.

RQ #1: What are the context and conditions associated with a Social Entrepreneurship Network over time?

First, I will describe the context of the social entrepreneurship network, which includes the history and development of the network over time.

Course-Grained Social External Structures: Movement over Time External Structures crystalized over time (1999-2012)

This research gathered primary data over a five-month period of time after BullNet, the social entrepreneurship networks, inaugural year of operating. The retrospective data and historical documents collected helped create a temporal component to examine the drift of conditions and action-oriented mechanisms over time. Temporal bracketing decomposes processes into successive eras separated by discontinuities, a strategy particularly well suited to analyzing nonlinear organizing processes (Langley, 1999). This technique is valuable in case studies because it allows researchers to determine whether theorized processes are replicated across eras. Through this technique, a "shapeless mass of process data is transformed into a series of more discrete but connected blocks" (1999, p. 703). The change in the nature of how the network developed will help us understand how the current form of a social entrepreneurship network emerged. Moreover, it will help us examine how the network may continue to adapt and change in the future. I will describe the time period over a 12-year period that includes three important milestones (Time 1, 2, and 3). These times were associated with

three specific events over the course of the emergence of the social entrepreneurship network.

Time 1: The seeds of an idea: Social Innovation Enterprise Zone (1999-2005)

Time 2: Working groups that adapted the idea: The development of a member network (2006-2009)

Time 3: The Social Entrepreneurship Network, BullNet, established a curated membership network (2009-2012).

The members and partners I engaged were involved in at least one and sometimes all three time periods.

Time 1: The seeds of an idea: Social Innovation Enterprise Zone

At the early stage of development, a few individuals in the city created the idea of a Social Innovation Enterprise Zone based on examples of other cities around the globe. The "zone" would be focused on "triple bottom line" principles. These individuals were primarily based in the financial industry. In my interview with the Founder, he said:

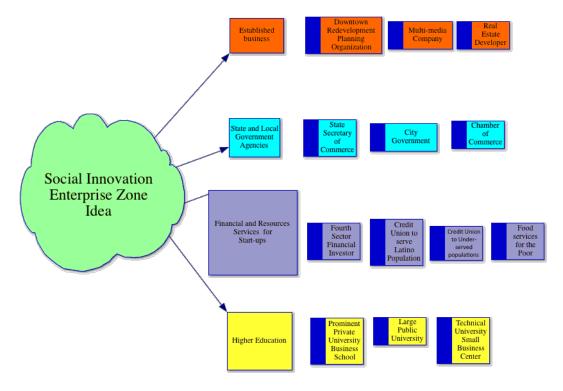
Back around 1999, I wrote a white paper that built off of research that I did before, when I was trying to figure out how you help drive a market that ties social innovation and entrepreneurship together. I realized that these concepts were beginning to enter into academia (Interview 16).

His vision was for the foundation to be a Social Innovation Research Park (or a SIR Park), much like the Research Park located in the area. This SIR park would consist of multi-disciplinary Research and Development neighborhoods with University, Corporate, Non-Profit, and Government facilities intertwined, including a Social Innovation High School, residential housing, executive centers and hotels (Document 1).

This idea incubated and in 2005, he convened a group of likeminded individuals to discuss the increasing role of social innovation in the area and how it might expand in a SIR Park. These players included local developers, university partners, financial backers, and government leaders.

In Figure 12 below, which was derived from the interviews and described in the historical data in BullNet's strategy documents, one can see the fragmented set of actors that are not aligned under one specific organization, mission, or vision. The colors indicate the different types of organizations, the size (which is notional) indicates that relative number of actors involved in the initial idea phase. The idea was spear-headed by the financial and resources services community especially a new bank setup for the primary purpose of serving the "Fourth Sector", or social entrepreneurs. There were a few established businesses with interest, the government climate was open to new ideas, the universities in the area were also beginning to write and support the foundational ideas around social entrepreneurship.

Figure 12: Time 1 - Social innovation enterprise zone idea



The early thought leaders that came up with the Social Innovation Enterprise

Zone Idea concluded that there is a robust social innovation community in the area but it

"lacks cohesion, common programming space, ready access to talent and capital, and
recognition as an important driver of economic growth in the region" (Strategic Plan).

They believed there might be a strong enough social innovation community to support a

SIR.

Time 2: Working groups to flesh out the idea

By fall 2008, the group transitioned from discussion into working groups to examine what would come next. The working groups were established to flesh-out the ideas and create recommendations. They focused on Individual Development, Organizational Development, Campus Build-out, Policy and Advocacy, Recruitment and

Retention, Investment and Scale-Up, Impact Measurement, and Outreach and Communications. As a result:

A set of recommendations emerged, centered on the creation of a social innovation campus in downtown <The City>. This campus would serve as the hub of a cohesive movement – with "spokes" emanating into every corner of the community to engage a diverse range of stakeholders in activities and programs designed to intentionally and dramatically accelerate social innovation in the region (Document 4).

Figure 13 describes the nature of the working groups at the time they began to form. More prominent and emerging leaders from the community became involved in the various focus areas. They stepped out of their traditional education, finance, and government roles and discussed the issues from a community need perspective. In Figure 13, you can see a new network emerge that crossed the traditional silos of the organization these leaders inhabited.

Social Innovation Enterprise Zone Working Groups Secretary Campus Build-out City Government Technical Impact Measurement Small Business Individual Development Center of Commerce Investment Large Public and Scaleto Under-served up University Organizational Development Commun-Sector ications Financial Investor Estate Policy and Advisory Credit Union to Downtown Redevelopment serve Latino Recruitment and Population Retention Independent Green Initiatives Exercise Certifying Business Body Consultancies Company state and Local Government Financial and Higher Established Key Resources Education business Businesses Agencies Services for

Figure 13: Time 2 - Working groups established

Community engagement: Working Groups

One interviewee involved in the working groups explained it as "old fashioned community development. Maybe that's the heart of it" (Interview 19). He goes on to say:

Sitting inside a university, in BullNet's case, my concern is that this can't look like a University thing being done to the community. On the other hand, community things are very political. In <The City>, there is a very strong African American political base that you want to get things done, you have to be mindful of that. If we're going to truly advance social innovation in the community, I feel that the community needs to have a voice in that, whether it's a vision for itself and the services needed to support the innovation within that vision. Others may disagree. In order to be successful, one of my priorities is to see community engagement and community involvement. (Interview 19)

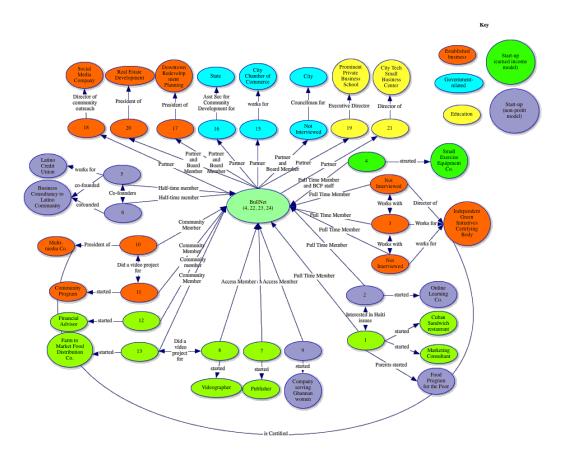
They held an initial meeting at the local research park Foundation headquarters to bring a group of stakeholders from around the community (a dozen or so) to talk about how to create a vision for <The City> by the year 2020 (Interview 16). These leaders made recommendations about how to establish a hub and spoke network that would provide the resources, knowledge, and connections needed to spur social entrepreneurial development. These hubs would have a governing board of leaders from across the community. The network would be lead by a non-affiliated Executive Director whose job was to serve the members of this new community of social entrepreneurs.

Time 3: BullNet establishment: A Curated Membership Network

In Fall 2009, a diverse group of city leaders stepped forward with a \$100,000 planning grant to invest in this vision under the new name of "BullNet". In January 2010, BullNet convened a 20-person executive committee and the strategic working groups comprised over 150 citizens and community leaders. They began a three-month process that culminated in recommendations within each of their respective eight topic areas.

Figure 14 provides a snapshot of the curated membership network at the time of the interviews. In this Figure, one will find BullNet at the center of a number of different types of organizations (established businesses, start-ups, non-profits, government, and higher education. Each participant with whom I spoke during the course of the study is mapped based on their affiliations to BullNet. The Interviewee numbers in the Figure correspond to the participant numbers found in Table 4 of this Chapter.

Figure 14: Time 3 - BullNet network map at time of interviews



At this point, the network is more like a hub-and-spoke focused on the hub of BullNet where it was designed to create the conditions like space, social gatherings, and supportive space to innovate (Interviews 1, 6, 9, and 12). These processes and mechanisms were most self-similar to the needs of the entrepreneurs, and therefore, organizing began to take place around these needs. One participant said,

What brought me to <The City> in the context of [BullNet] is it dovetailed into what we're trying to accomplish here. I've gotten into this concept of how do you create the ideal conditions for social innovation to thrive at this ecosystem level. It's something I've been thinking about for a little while, and I got engaged with a number of folks in <The City> who were starting to think about the same things. I began to realize that <The City> could be the place where we [the Working Group at Time 2] wanted to make this happen. It has all the right ingredients to try something like this out. It's small enough, manageable enough so you can get to the heart of the city quickly, get to the top leadership and the influences and create something that will have almost immediate impact (Interview 22)

This research found that BullNet at the time of the study played the role of a convener or facilitators of the organizations found in Figure 14.

BullNet's role of convener or facilitator

By convening many diverse members of the community, BullNet was able to address social problems within the community and make a plan to solve them together....The role I think we play is that of a broker and convener, facilitator of those conversations. To give you a quick example of that: we're deeply engaged in a conversation about "Connected by 25." We've got 4, 000 young people between 16-25 that aren't in jobs or school in <The City>. That number hasn't moved. It's been consistent over the last couple of years. You've got a bunch of

folks that are trying to invest to solve that problem. It's a drag on our economy, society, and it's the right thing to do. You have universities, counties, foundations, the city all-investing in trying to solve this problem. The problem is they are all investing in a fragmented way, and it's not making much of a difference. Similarly, you've got a bunch of different organizations working to solve that problem, but they are working in a fragmented way and not working together (Interview 22).

The seeds of an idea started in 1999 about a collective city movement, moved to a set of working group meetings, today it is a co-working space, tomorrow it could be an incubator, after tomorrow it could be an accelerator (Interviews 4, 22, 23, and 24). This process of co-creating the movement with the city over this period of time resulted in BullNet being established as a community effort to support social entrepreneurs.

Course-grained social structures defined at Time 3

Using the following table, I will describe social structures through the codes that emerged from the analyses of the data at the Time 3, the establishment of BullNet, the time in which this study was conducted. I applied the constant comparative method to extract and refine coding categories from interviews, field notes, and documents. Data were coded with "descriptive codes" at two levels. First, "master codes" were attached to denote broad conceptual categories (e.g., ecosystem). Second, "subcodes" were used to denote subsets of the category (e.g., Institutional structures like government roles). In addition, "pattern codes" were used to denote relationships between the "descriptive codes" (e.g., government tax policy led to developers being attracted to <The City>) for my own understanding. As categories, subcategories, and relationships emerged, I began

comparing this data-driven conceptual framework with my analytic framework. At that point, I used pattern matching (Yin, 1994), a deductive technique in which patterns observed in data are matched with patterns derived from my analytic framework.

The conditions that I will describe based on the data from this case study include the "constraints and influences imposed upon particular agents by the external structures" (Stones, 2005). The course-grained structures in this case include the roles of institutions such as the state and local government, the universities, public/private partnerships, and the Chamber of Commerce play in creating constraints on the system.

In the institutional realm of course-grained structures, these organizations noted above describe how the effort to create the SEN through setting the policy environment (ie. external structures) characterized by workforce development (Chamber of Commerce and the City Government policies) and economic development (public/private partnerships and developers) for the city. These conditions signify an environment that the social entrepreneur actors describe as (i) sensitivity to the local context and (ii) vision for collective impact, (iii) co-working space. The course-grained structures in this analyses provide information about the *conditions of existence* and answer the first research question: *What are the context and conditions associated with a Social Entrepreneurship Network over time?*

I will discuss the course-grained structures that were deductively created using the following master codes defined as meaning, power, and norms. Each of the subcodes were arrived at inductively and emerged from the analysis of the interviews, documents, and observation.

The following master codes were identified in order to describe their subcodes which emerged from a broad analyses of the data.

- Meaning Level of communicating meaning through making sense
- Power Level of power distribution through competing value tension
- Norms Level of norm action congruence through personal efficacies

For each master code there were subcodes, which will be described through the data and evidence presented in this section. The subcodes include:

Meaning

- o Co-working space
- o A vision for collective action
- Sensitivity to local context

Power

- o Ecosystem of supporting organizations, structures, and policies
- o Government structures and policies
- Access to financial capital
- Local universities providing talent and resources
- o Local Developers and Public/Private Partnership

Norms

- o Network sustainability meetings
- Social events and gatherings
- o A hub structure
- o Staff membership criteria
- Entrepreneurial development program

Meaning in course-grained structures

The structural dimensions in this study describe how BullNet came in existance. The study participants describe making sense of the tensions associated with understanding the existence of BullNet, the institutional structure which is the focus of this study. The following social structures were described and observed in the case that supported the participants' ways of meaning-making for the existence of BullNet:

- Co-working space
- Vision for collective action
- Sensitivity to local context

These structures created a space to communicate meaning and identity and will be elaborated on in this section.

Creating meaning through a co-working space

One primary function of the social entrepreneurship network, BullNet, is its physical space. BullNet is located in the middle of downtown. Members describe it as an inspired space for working, meeting, innovating, learning and connecting. Members found great value in the physical space, its convenient location, and the way in which it legitimizes and professionalizes their businesses. Many members found that they were looking for a co-working space to share the real estate costs and what they came away with was much more unexpected. For example, one member using the space said, "It's that shared space. A lot of entrepreneurs feel like you're doing it alone. When you have that community for support it changes your day" (Interview 9). She went on to say, "it's nice to have the community and open working space where you're surrounded by

creative energy. I moved to <the city> once I got involved here. I fell in love with the city and the concept of shaping something new" (Interview 9).

Shared learning space:

Many members discuss liking the space because it's a "shared learning space; you can learn from each other" (Interview 9). Because everyone is at a different place in his or her businesses, there is opportunity for learning and innovating. Many individual members were observed offering free coaching sessions to other members. For example, they brought SCORE, a group of retired business professionals that help start-ups, to the space. This created an opportunity to learn from successful business leaders.

Supportive environment

A member thought of the space as "being able to bring your full self to work", suggesting, "I think one of the values of [BullNet] is that it's a safe space where I can bring my full self" (Interview 14). If one looks at the space as a metaphor, it's an opportunity for people to come together from different perspectives, businesses models (from a not for profit to for profit) and convene in a mutually supportive environment. BullNet's core offering is the provision of a supportive working environment for entrepreneurs to learn by doing and grow their ideas and projects into sustainable businesses.

Physical proximity

Physical proximity was important to start-up's in this community. One member said, "I joined in April after their membership drive. I joined because of the location of my restaurant business. Before I worked from home, and then I worked from my parent's home office. I was finding that I was waiting too long in the day to move from [local

restaurant] back to the office because it's a 20-30 minute drive away. [BullNet's] geographic location was very appealing. I can now walk from one business to the other" (Interview 1).

The members using the space would suggest that it is through our connections that change how we think of things. The Executive Director suggested that:

I think having physical proximity and relationship building and a community forum in a way that brings people together in real time, in real ways makes a huge difference. I've done a lot of work in the virtual space before, and I think the virtual relationships, if not grounded in the physical relationships, are tenuous. I see us as having not just a working space but a community space is really valuable. People pop by here all the time just to say hello. That makes a big difference. (Interview 22)

One of the working group members said, "I think the physical space is an important part of the plan...the physical space where people try to get their arms around the concept in much more tangible ways, even if they're not actually leasing the space, there is a home base". He offered, "once we had physical space, people finally got it" (Interview 20). You can attract more investors and more participants when there's something physical that binds everyone together...the other important aspect is the density of participants and users. If you have an environment where there are 1-2 social entrepreneurs, it's much harder to exchange ideas and motivate and inspire people. If there are 100 entrepreneurs in your community, there are more ways of connecting and it's much more accessible and inspiring. It encourages more people to get engaged (Interview 24).

Something in the middle

The co-founder who had worked previously for another Social Entrepreneurship Network and brought much of her learning on co-working spaces from there said, "with facilitating, there is the theory that you put something in the middle? I think the space is something in the middle. It's like something to hold in common or something to connect. We all feel comfortable [here]; it's something in the middle that makes people have a way of relating to each other" (Interview 23).

Another staff member reflected,

I really think our differentiator is that we create a very strong community. It sounds silly, but people become friends in the space also. Because of that, they share skills and resources; they treat each other like friends would. They are committed to their venture, but also committed to seeing their friends' ventures succeed. I'm not sure if other entrepreneurial support organizations are able to do that, especially in [this] area because a lot of them do not have co working spaces. (Interview 24)

One of the members suggested, "the people that move through this space are important; some are potential mentors. I could sit at my desk and network. It was good for others to see that I was in the space and doing stuff. You could sit at your desk and do work and network at the same time" (Interview 13). When describing the how BullNet came to be, one member of the working group said, "the space was one of the outputs but the community was there from the beginning" (Interview 14).

Safe space: Another important aspect is that it is a safe space. One consistent condition I heard is that [BullNet] is a safe space. You can have diversity of opinions and

ideas because they have a similar value system, but we do not have to all agree on how we are getting there. One member described it as an example of the "third space" -- home, work, and the third space where people want to go and spend time working on their business that is not necessarily their office". Going on to say, "It's a landing pad and a space where people who are like-minded can get together and build off each other's ideas. Entrepreneurs love that. Creating places where they can connect is valuable to them" (Interview 15).

BullNet is providing an interactive space where social entrepreneurs will want to be so they can interact with other social entrepreneurs. The space is set up to encourage that. They run seminars that teach people how to grow a business, and they provide people with social activities to interact with each other. One of the strategic partners suggested, "our role is to help BullNet survive, and on the recruitment side, we're building the environment outside their particular building, that will attract the social entrepreneurs to be in this community, where they then can locate" (Interview 17). *Provides creative energy*

Another aspect of the shared space is that it provides creative energy. One member said, "the hardest part about working from home is I had no creative energy after a day or two in the week. Here I'm constantly being recharged. There are other people that are working so I can't goof off and there are fewer distractions" (Interview 1). These mechanisms of the physical co-working space enable opportunities for people to connect through a safe psychological space, providing energy, creating a middle or "third" convening space, and social learning.

Opportunities for strategic bumping/random collisions

"The opportunity to meet unexpected people is also important" (Interview 12) suggests one of the members of BullNet. Many members and the staff and partners suggest, "There is value in being able to bump into someone at a café and walking the street. BullNet came out of that concept. Let's help direct that bumping into each other because that's what collaboration is all about" (Interview 16). Another member goes on to suggest: "The other thing I'm discovering is that the biggest value isn't just the space (it's just a desk, printing, etc.) it's the extra resources: being able to connect with other entrepreneurs" (Interview 1). Observed through the knowledge café's, co-working space, and meetings, there were many opportunities for strategy, yet unexpected collisions of people. For example, in the middle of one of my interviews that took place at a local coffee shop, a city leader walked in the door and discussed a new opportunity with the member. This was an unexpected opportunity and created a shared experience for us to discuss these types of connections.

Meaning described as sensitivity to local context

This sensitivity to the local context is characterized by one member suggesting, "[BullNet] can exist in <this city> because of a climate that was already in <the city>. Projects like this are feeding that. It takes on a life of its own. [BullNet] is also feeding that climate...<the city> is a very accepting culture" (Interview 1). The context of the city, which will be described in detail in this section has created an environment that welcomes social entrepreneurs, has service providers focused on their development, has university programs that support the education, and has tax policies that support their growth.

Many of the members describe that there is something special about the city.

BullNet is effective because members suggest that BullNet represents the values of the city. One member put it this way:

I think one thing [BullNet] does well is identifying and understanding the social needs of the community. A lot of the [BullNet] members are trying to meet the needs of the community. [The city] is a community that has always had a strong sense of social justice. [BullNet] accommodates that spirit (Interview 8).

Moreover, the city had gone through significant upheaval both financially and socially as a result of the decline of their biggest industries (including textiles and tobacco) and the socio-economic and racial tensions that were prominent in a redeveloping southern city.

BullNet is a place where people can integrate diverse ideas. A lot of people see BullNet as being transparent to not just having the purpose of making money, but making money so they can continue to help the community. One member said, "the triple bottom line is appealing to a lot of people. There's an integration need…[BullNet] is a mixing bowl to bring the disparate elements to allow them the means and the space to figure out how they can help each other" (Interview 8).

While many entrepreneurs in the network have missions that are global, all had a feeling they were doing something special in the community in which they were living (Interviews 1-24). The following data describe that course-grained structures that showed the sensitivity to local context being a necessary condition in all the institutions that were involved in the Bullnet Network.

One member shared with me a video he created focused on their enterprise and its connection to BullNet. In the video he said, "the great thing about local is you can do it everywhere" (Document 10). Many members feel that BullNet is local to <the city> because it is an easy concept to understand. The need to connect and innovate is visual and visceral in this city. Like the concept of bricolage (Levi-Strauss 1962), BullNet builds off the city's culture. Because the buildings and support network were already there, one member says, "we work with pre-existing networks to reach those needs and goals much faster" (Interview 6). During the course of the research, BullNet decided to expand to another city in the state. The struggle with context and conditions in the other city was palpable to the founder, the staff, and even BullNet members. One member said, "I think the priorities are enabling entrepreneurship in <this city>. There is a lot of attention by BullNet staff to grow in other communities. I think they are dabbling in other areas that are less clear in how it ties into the community and what the benefits are to those that are paying dues" (Interview 15). This point was not lost on the staff who are focused on replicating the model in other cities. For example, the Executive Director, when asked whether this would work in other city, said:

Well, we're about to find out. We're doing an SEN in [another city in the state]. It's a very different dynamic, built on a very different vibe. It's not an old industrial town. It's a sleek, financial center that has gotten rocked because of the current economics. We'll see. I think it will have a different flavor to it. It's a bigger city so some of the convening work that we're doing here in <this city>, there's already an organization that does that. We'll be partnering with them very closely. There are different dynamics (Interview 22).

There is a belief that the fundamental tenant of building out "an intentional community" (Interview 22) that is geared around social innovation and impact does have resonance in different types of communities. However, they are very aware that the context is important and it will not replicate exactly the same in a different context.

Meaning making through a vision for collective action

"Any initiative aiming for a significant impact on a city or region's future must have a clear, compelling, and inspiring vision that both the public and private sectors can get behind" argues the Founding Director and one of the thought-leaders behind the social entrepreneurship movement in the city. He goes on to say:

Many communities have a number of players who would like to see sustainable companies and policies flourishing locally, but lack an overall unifying vision that can lead to identifying synergies and cross-purpose leadership...The words and actions of those in the community, from the civic leaders to the business leaders, are important, but a city should also have at least one tangible, visible, high-profile project (Document 1).

Overall, the vision for the city was a "downtown rising again". This symbolic meaning was what they saw as the unifying vision around sustainable practices that focused not only on the environment but the social equity as well, while creating jobs and opportunity. In my interview with the Founding Director, he says, "[the BullNet project] is a tangible and high profile project that can also have a dramatic impact on the city's footprint as a hub of social innovation" (Interview 16).

This vision was echoed by many participants when they described their participation in what they saw as a "movement" going on in the city. One participant

said, "I'm eager to take part in the social movement that's happening. I want to play my part in this emerging sector to help move it along" (Interview 4). Another suggests, "we support it because we think social entrepreneurial movement in [the city] is a good thing for the community" (Interview 15).

However, this vision alone created a tension within members of BullNet. For example, one member said, "if they're trying to start a movement, I'm frustrated by a couple of things... I feel like they don't make it easy for me to tell their story" (Interview 7). She argued that they need to market the story around "social innovation". This conjuncturally-specific knowledge of what was going on in this city helped build a collective vision shared by many participants.

The network communicated the meaning for its existence through the social structures described in this section. The meaning-making structures were (i) co-working space, (ii) sensitive to local context, and (iii) vision for collective action. The meaning-making structures coincided with structures that emerged that describe how power is distributed in a social entrepreneurship network.

Power and allocation of resources as course-grained structures

This section describes the level of power distribution among the actors surrounding BullNet. The following dynamics were observed in the case that describe where power exists in the network.

- Ecosystem of supporting organizations
- Government structures and policies
- Access to financial capital
- Local universities providing talent

• Local developers providing real-estate support

These power structures were described by participants as a way of understanding the resources needed to sustain the social entrepreneurship network and will be elaborated on in this section.

Distributed power through an ecosystem of supporting organizations

To understand the context and conditions associated with this social entrepreneurship network, I found an ecosystem defined by the structures of roles of the various players, the responsibilities for supporting the entrepreneurship community, and the relationships between them. This section will describe the structures within the network that distribute power among the various actors in the ecosystem. To put it directly, Robert Egger, founder and president of DC Central Kitchen, said:

We're only on part of the equation in solving problems of poverty, hunger, and homelessness. The day we begin to think of ourselves as more vital than other agencies on the rungs above and below us is the day we fail ourselves, our clients, and our fellow nonprofits. We're all in this together, as parts of a larger ecosystem of giving and servicing. We need to start thinking and acting together if we are to have any home of making our efforts work (Egger, 2004, p. 60).

The evidence to support my understanding of the ecosystem was gleaned from interviews with partners and members who have participated in this movement from the very beginning as well as new members. In addition, I interviewed the founder and original thought-leader behind the concept of a social entrepreneurship hub in the city. I also reviewed an original document that laid out the plans for this hub approach. In addition, Bloom and Dees' (Bloom & Dees, 2008) discussed the ecosystem surrounding

this particular community in their paper on "Cultivating an Ecosystem" (Document 2). I observed a meeting of the Fourth Sector Network that included stakeholders from across the social entrepreneurship-concerned community including academics, support organizations, and hubs. Lastly, I interviewed the Executive Director of the organization about his view of the surrounding ecosystem supporting social entrepreneurship in this community.

The following map shows the diverse set of user groups in the social entrepreneurship space that create and promulgate the structures that define the elements necessary to perpetuate them. Figure 15 shows the ecosystem that was shared by the community-focused network that described the key roles, responsibilities, and relationships in the context of social innovation for the city.

Figure 15: Ecosystem for social entrepreneurship



The structures in the ecosystem created conditions for the social entrepreneurship networks and included capital, community, talent, skills and training, customers and clients, office space, expertise and advise, and networks. This understanding of the ecosystem was similarly articulated at a staff business meeting during a conversation about stakeholders and what ultimately appeared in briefings for the Board of Directors (Figure 16).

Figure 16: Social entrepreneurship ecosystem from business meeting



These key roles, relationships, and structures describe the conditions and the structures that support the enablement of entrepreneurial action in a community. What follows is a description of how these structures were manifested in the ecosystem surrounding BullNet.

Top-down power through government policies

The city, county, and state governments are all taking part in BullNet as the social innovation and entrepreneurship hub. Both <The CIty> and the state are struggling with social issues that would benefit from further economic development work in both the inner city and rural parts of the city and state. Many participants argue there is a need for resources like a supportive tax policy for social entrepreneurship businesses, which would bridge the gap between government services needed to decrease social problems (such as crime), which would create further positive growth. BullNet has a partnership

with local and state governments that could and can advocate for financial incentives or tax breaks related to the social innovation investments and businesses. One of interviews with the director of a downtown economic revitalization organization said:

We didn't have [a] river or state capital, but what we had was a lot of cool buildings. When I discovered these historic tax credits, and figured out a way to do tax increment financing even though it wasn't legal in [the state], I figured out a way to do it that would satisfy the city and county attorney. We then had a toolbox that we could then start leveling the playing field between suburban and urban development in a way that the goal was to, based upon what I saw in downtown D.C., take these old buildings and bring them back to new life, which is in a way a little bit of social entrepreneurship. We didn't know it at the time. We didn't have a name for this stuff. It seemed like the right thing to do. We were able to put in some tax credits and incentives, get the city council and public sector to agree to do it. (Interview 17)

In addition to the policies being put in place at both the city and county levels of [the city], there have been recent statewide policies put in place as well. It was explained, that one important legislative move, introduced by the Lieutenant Governor, had three components to attract social innovation businesses focused around green technologies:

- 1) A \$15 million fund to attract small businesses and entrepreneurs in "the Green Economy"
- 2) Proposed tax credits for businesses and investors operating in the green economy, and
- 3) Proposing \$150-\$200 million a year of state Escheat funds are invested from the State Treasury into green businesses.

These policies are emerging and have become increasingly focused on sustainable energy legislation, as well as a continued climate of innovation as it relates to social equity and education. One partner said, "these structures are changing through the actions of administration at [a prominent private university] who allow for a mix of scholarship in areas of law, policy, environment, and business" (Interview 19). The thought-leaders says, "the kinds of business structures you're able to create, those things are set in place by government" (Interview 16). It is through statements like these, that we begin to see the interaction of the course and fine-grained structures. For example one member's organization was a certified B-Corp (or Benefit Corporation), a new legal structure that was adopted by the state General Assembly while I was conducting the study. A B-Corp requires the organization to include non-financial interests, such as social benefit, employee and supplier concerns, and environmental impact as part of their charter. In general, participants believed that government structure like this needed to change in order to support increasing social innovation.

Government structures as an institutional barrier

Government also acts as an institutional barrier. One participant said, "you don't have the government policy yet that fully understands and fully supports this space" (Interview 16). There was a choir of voices suggesting the need for government to use policy to make conditions more supportive of entrepreneurs and social entrepreneurs, in particular.

In a local example, one entrepreneur I interviewed recalled that an organization they were supporting was promised a tax incentive by the local government (this case was in Ohio) that would make it a cash flow-positive experience for them. The city

government started saying they did not qualify (after they had already done it). She recalled they got in touch with their National Public Radio 'Marketplace' contact to get the word out, and suggested, "I think it got the issue in the public conscience. Before it was one person fighting a legal battle" (Interview 3).

The Executive Director of BullNet said that government policies are more than just supply side of the argument. He examined how government policy impacts the demand and people's behavior around procuring goods and services:

I've always felt that policy plays a very important role, but I'm getting into the more micro parts of that. Initially, I thought about how you create the ideal policy conditions for innovation to thrive. How are you changing tax code to be able to encourage more for-benefit corporations? To really stimulate the supply side of it. The other questions we're trying to get into how, is how do you deal with procurement? What are procurement strategies? What various organizations are buying to help stimulate the entrepreneurial economy? That is an important question. (Interview 22)

He went on to say:

For the most part, government is pulling back in the area of direct service delivery. These services still need to get delivered around education, health care, etc but we need to be able to create room for innovative organizations to deliver those services in highly effective ways. You're working with fewer resources. (Interview 22)

As seen by the data, it shows that supportive government policies, that make room for organizations to innovate the means to deliver services that support the public, are a

critical part of the context of who holds power in the ecosystem of social entrepreneurship networks.

Power distributed to those with access to financial capital

"We are a big idea that has not been capitalized" (Interview 23)

Financial capital is one of the biggest barriers for social entrepreneurs starting their business. I heard that those starting up socially conscious businesses do not have a lot of institutional barriers (often because they are just starting-up), but they also do not have a lot of financial support. In fact, they have great financial barriers. One member of BullNet said:

A lot of people saw the [joint member video project] and saw the power of what I was doing. The Chamber noticed it. They wanted to do more of it. The problem is the money. We're in this to make a living. I don't want to struggle with how I'm going to pay my car insurance bill. A lot of businesses see the value, but they haven't realized the value to the point where they are willing to put a couple thousand dollars toward it. The Chamber also pushed back - this is more expensive than we thought. It's working for me in that I know people realize the value, but it's not working for me in that it hasn't brought a whole lot of new business. (Interview 8)

The Executive Director stated, "we're trying to foster more relationships...being able to map out who are the major capital providers in our community, so that we can plug various organizations into the relevant capital streams...you have to have a real visionary, special space, [but] there are assets that need to be in a place to make it work" (Interview 22).

There was a general awareness among many members that access to capital was the most critical area lacking in the city. A business, sustainable or not, cannot survive and grow without financial backing. With both public and private money, or some combination of both, the area struggled for many years to find financial investment or assistance to attract and grow social enterprises. The city and county governments have a number of incentives in place to lure businesses that create jobs into the community. However, over time, the city has become home to a number of financial entities including the country's largest community development credit union. In addition, there are a number of community specific investment capital organizations including a Latino Credit Union, Capital Investment firms, and other foundations. The nation's first commercial venture bank focused exclusively on triple bottom line businesses, Fourth-Sector Bank, was created for the region. Access to financial capital was considered an important context by members, partners, and staff of BullNet.

Local universities providing talent and resources

The local universities with dedicated work in social entrepreneurship were the cornerstone to the social innovation hub idea. The thought-leader argued, "they foster the collaborative work that can cause big technology breakthroughs, hatch start-up companies to commercialize such breakthroughs, and provide a ready source of talent" (Interview 16). The city is home to two prominent universities. The thought-leader said "both universities technically "anchor" the area [and] are doing substantial work in areas of the fourth sector" (Interview 16). One University, a public historically black university, is doing major work in the area of biotechnology. The other University, a private university, is doing major work regarding social entrepreneurship and the

environment. This school is identified as a global leader in these areas. Nearby is another university, which has a major presence in social enterprise through its institutes, composed of dozens of innovative labs created by leading faculty, which are doing work in Social Entrepreneurship and Biotechnology. "These universities have already successfully "anchored" another hub, the Research Park" (Interview 16). As we will discuss later, the Research Park is often used as a metaphor for what the knowledgeable agents in the city are trying to create around social change.

These universities are partners with BullNet because of their locations in the city and anchoring opposite sides of downtown. The private university's Institute is led by Gregory Dees, the preeminent scholar in social entrepreneurship. They have networks that stretch across the globe and connections to some of the top academics and funding sources. It is also educating a large number of MBAs focused on sustainable enterprises – for-profit and not-for-profit. Its business school is also world renown for its finance program. As discussed, one of the huge gaps in social entrepreneurship is access to capital. With BullNet in their backyard, the business school is a prime provider of talent, which attracts students from around the world who want more balanced scholarship and careers. During my prolonged engagement with BullNet, I found the university interns working in the space, alumni employed on staff and as members, world-renowned faculty providing executive education events at BullNet, and [a prominent private university's] social events hosted at BullNet. The Founding Director described in both his white paper and our interview his view of BullNet and the University serving as complimentary anchors for social entrepreneurship.

As a public university, the other university attracts state dollars for research and development. As a minority serving institution it is able to educate an entire population who can take it back to the communities where they are from. In addition, a local Tech University, a local community college in Downtown <The City>, provides entrepreneurs with free courses on how to run a business. My interview with a BullNet partner who runs the Small Business Center (SBC) at the Technical University says, the SBC is the "door" of the local community college. I walked the footpath between BullNet and the Technical University for the interview, which he described, is typical for many members at BullNet. He says:

We are a traditional college entrepreneurial-based training. We will attract a wide variety of people based on that, but we might not attract nor be part of the excitement. In the last 2-3 years, <the city> is turning out to be a very entrepreneurial place and a lot of 20-somethings are walking around with their laptops under the arms and starting a business. If we're going to play a role in that, we're going to have to partner with people like [BullNet]. It's a matter of whom we reach, who they reach. I have a handful of people that have become members of [BullNet]. They are taking advantage of the full experience, full immersion (Interview 21)

Therefore, it was found that university and educational partnerships provide resources to BullNet and the community in order to develop social enterprises. These are an important part of the context found in the city under investigation.

Access to resources through local Developers and Public/Private Partnerships

There are seven major developers transforming the Downtown/Inner City into distinct districts tied to their histories. These developers through their resources and access to physical space create some of the external structures that modify the internal structures for collective action. Many of them are already creating green properties including office space, a hotel, and residential space. By investing in <The City>'s real estate infrastructure, they are partially betting on an appreciation of their investments in downtown through triple-bottom line business attracted to their spaces. The BullNet Founder in a white paper discussing the future of <the city>, says:

In addition, because there would be such an embracing of this concept, it would prove easier to find other developers to come in and fill the gaps that remain in Inner City. (ex. East part of the City) and also assist current developers in attracting more capital to their current projects to expand their work in the city as they would then be able to sell the unified vision to potential investors who will be able to better understand where the influx of people into the space will come from. (Document 1)

Organizations like Downtown [City] Inc. were created to bring business to downtown. Several businesses charged with bringing businesses to downtown [City] have been involved since well before BullNet was established. One prominent developer I interviewed pitched the concept for BullNet to the county "as part of a public/private partnership probably six years ago because I felt like that would be a vital part of revitalized city center" (Interview 20). He pitched to the council that the:

City center [is] the perfect place to get local people vested and invested in downtown. It also is unique that a lot of the buildings are smaller, which creates some challenges, but it also creates opportunities for smaller, start-up businesses to get involved. (Interview 20)

I observed that there are many different buildings in the downtown area. Before BullNet started, <a prominent real estate investment firm> had ten tenants that were social entrepreneurs in its various buildings. The developer said:

We knew that there would be a demand for this sort of thing if it was created. We could attract additional entrepreneurs. There are already starting to co-locate in city center: the space is cheaper, it's funkier, more accessible, more walkable. But those 10 didn't know each other existed. We knew because we were the landlord of these different properties. It was this weird position to be in as a landlord: you should talk to this person who is in this other building and they are doing something that might be applicable to what you're doing, etc. That's not the traditional role of the landlord (Interview 20).

Developers in the area have been one of the primary catalysts over the last two years helping entrepreneurs make connections and find financial resources. One developer said, "I was doing some of the things that [BullNet] is now a formal outlet for" (Interview 20). These kinds of projects lead to the working groups that started BullNet.

These players include providers of financial, human, knowledge, networking, and technological resources, and any brokers or intermediaries that channel these resources to those who want them. Inadequacies or inefficiencies in this category can seriously

constrain social entrepreneurs' ability to achieve impact, just as a plant will struggle if it is cut off from adequate sunlight, water, or other nutrients (Bloom & Dees, 2008).

Norms as course-grained structures

The structures describe the level of norm action congruence through the personal efficacies of the participants in BullNet. The following structures were observed in the case that describe the set of norms, or rules, used by the collective to judge the appropriateness of social interactions and their justification for having BullNet, as the social entrepreneurship network.

- Network sustainability meetings
- Social events and gatherings
- A hub structure
- Staff and membership criteria
- Entrepreneurial development program

These norms were described by participants as a way in which they would interact with each other as a part of the network.

Network sustainability meetings

Fourth Sector Strategy Group Teleconference

The Fourth Sector is defined as social entrepreneurship, and I attended a meeting of the social entrepreneurship support organizations across the state. Fourth Sector Strategy Groups are leadership and action forums for discussing the broad values fueling the Fourth Sector, identifying the critical strategic issues needing attention from entrepreneurs, investors and funders, policymakers, scholars, and other stakeholders, making recommendations for and helping to facilitate action on these strategic needs, and

developing a more explicit sector identity. The Strategy Group includes a diverse but consistent group of experts who are committed to working together to address shared concerns and advance a shared strategy. The Strategy Group will promote action on specific areas of the Fourth Sector support ecosystem, such as legal and tax structures, capital markets, communications and branding, assessment and reporting standards, ratings and certification protocols, and others. Members of the organizations that support these elements meet through the Fourth Sector Network.

Business Meetings

Vendor meeting. I observed a business meeting with potential vendor that would support the social entrepreneurship network's work developing internet-based technologies to support the networking of members of BullNet. The vendor was a start-up of students from the local university. They were mechanical engineering students who were creating a social media services company. The founder of BullNet often uses students to bring new ideas to the network of social entrepreneurs. In this case, the meeting focused on the problems of connecting many diverse individuals, creating a market space where people could learn about each other and make new introductions. The students were invited to use the co-working space at BullNet in order to flesh out the idea, create a protype, and work with the other entrepreneurs. The purpose of the meeting was to create a tool that would make entrepreneurs more efficient and effective through the mapping of relationships between them inside the network.

Partner meeting. I attended a business meeting with a potential partner in developing grant opportunities, shared programs, and using the shared space. This meeting focused on the strategies that BullNet and this partner could use to build more

resonance around "green" companies participating in the network. The value to the partner was that their business model was around certifying "for benefit" corporations (B-Corps). BullNet's strategy was about supporting entrepreneurs that would build business that had a social mission. The B-Corps model was described as a great example of BullNet's task of creating metrics around social impact in the community.

Staff meetings: I attended 3 regular staff meetings where the staff of BullNet meets weekly to discuss the strategy for accomplishing the goals for the week. In addition, they discussed future initiatives and how to better define social entrepreneurship for their members. Lastly, I observed an impromptu staff meeting to prepare for a Board of Directors Meeting.

Social Events and Gatherings

Innovation Café Social Gathering. Innovation Café features a local social entrepreneur and his or her organization at a local café on the third Wednesday of every month. Following the presentation from the social entrepreneur, there is often entertainment from a local musician or artist. I observed an Innovation Café featuring a presentation by a recent member of the social entrepreneurship network. The member and his partner described their business venture to other members who had joined the evening session through invitation by the BullNet staff. Their venture was focused on bringing business education, professional services and financial partnerships to the Latin American community in the city. They were borrowing from a successful model based in Chile. The meeting created an opportunity for members to ask questions, share their own related stories, and socialize when the formal presentation was over.

Brown-bag lunches. BullNet hosts a brown-bag lunch weekly and invites its members to "come share your ideas, challenges and opportunities with the BullNet community!" During this lunch meeting, each of the members around the table discussed the main challenges they were facing that week in their respective business. Mostly, the discussion was around defining what each of the businesses was and getting feedback on how they described their organizations mission and its relationship to social innovation. Many of the people struggled to clearly define the social mission, especially those that were for-profit business models. However, each had a clear understanding of why they joined BullNet.

Annual Party: BullNet celebrated their first year with a party in their shared working space. It marked the accomplishments for the organization — from opening their space, to designing programming, placing talent, accelerating ventures, and building a community around entrepreneurs focused on creating positive change. In their party invitation, it read, "we're only just beginning and we have a lot more to do. So come raise a glass to all that has been done and all that is to come. We hope to see you and thank you for all that you have done to help make [BullNet] a growing success."

A "hub" structure

According to the Director of the program, BullNet became a hub for social entrepreneurship activity for the purpose of dramatically increasing the creation, scale, and impact of social enterprises in the city. The thought-leader behind creating an entrepreneurial hub in the city wrote a whitepaper in 1999 which "was spread around to a number of folks and got some conversations started about creating a social innovation hub" (Interview 16). One strategic partner said, "we got folks together and said how can

we solidify [the city's] image as a hub for social innovation" (Interview 19)? Over the course of several years, they held a series of leadership roundtables discussions around the state about whether the city could be a center of social entrepreneurship and innovation. From 2000-2003, these conversations took place around the state, then at the local private university, then with surrounding universities and city leadership. One partner said, "it was a Who's Who in [the city] and we talked about how we could take this urban environment and create a hub to attract folks here" (Interview 16). A recent report described BullNet as "a hub to support [the city] as a robust cluster of innovation for the region that will spur economic development, improve the lives of citizens, and pioneer a new model of urban progress" (Document 3). A BullNet staff member described it like this, "We are all in [BullNet]; we all feel comfortable there; it's something in the middle that makes people have a way of relating to each other" (Interview 23). It was clear that many of the community and leadership within the community wanted to see the city as a hub for social entrepreneurship. One partner said, "what works is that as we create a hub here as we get a lot of really smart entrepreneurs downtown, entrepreneurially-minded people at the universities gravitate toward it...If we can continue to position [the city] as a hub, more and more people will come to [the city] from the universities" (Interview 15).

The city as a social innovation hub was compared to Silicon Valley, which is known as the technology hub, New York, which is known as the financial hub, and Hollywood which is the entertainment hub. However, there are other organizations like it in the community with a similar mission. For example, there is a local center focused on supporting the advancement of social entrepreneurship at a prominent business school in

the city, which was set up to be a hub for the academic field of social innovation. This creates some tension in roles as to which organization carries the mantle. In this context, BullNet stands as a hub in the middle of academia, government, private industry, developers, entrepreneurs, and service providers. It was observed by two community leaders that having a hub is a condition associated with social entrepreneurship networks.

Staff and Membership criteria

The roles inside the hub include membership, staff, and partners. The members are broken into full-time, half-time, access, and community members. They are described like this:

- Full time membership is for those that need a dynamic and flexible home base for their start-up including 24/7 access to the space, a permanent desk and filing cabinet and an individual mailbox (Document 5).
- Half-time membership is for those who pound the pavement half the week, and want a stable and creative workspace during the other half. This level includes 80 hours of office time per month.
- Access members is for those interested in space for weekly meetings, access to a stimulating environment, and a home away from home downtown. This level includes 30 hours of office time per month.
- Community membership is for those engaged in the community, social and educational programming, services, and mission of BullNet, but not in need of space. (BullNet Membership Form)

Staff include a community manager, a resource manager, and an executive director. They generally share the duties of networking among members, providing programming to the membership, and attracting new members into the space. Lastly, partners include funders, supporters, and otherwise affiliated members from the surrounding community. Some partners are on the Board of Directors at BullNet. These roles support the infrastructure needed to sustain the activities inside BullNet.

BullNet became a hub for double and triple-bottom line businesses to convene through the mechanisms of co-working space, a peer-support network, regular events and programming, and a place to make connections with others. It is physically located at the main crossroads of the city designed to enabled "random collisions" of people who are coalescing around the new course-grained social attractor, BullNet.

Membership criteria. Each member is required to fill out a membership form (Document 10) seen in Figure 17 below.

Figure 17: BullNet membership form

BullNET Forward Membership Application

Organization: Mission:
Contact Information (email, phone):
Please provide a brief description of your venture and where you are in its development (if applicable, attach a copy of your model, business plan, etc). What needs do you foresee associated with that stage?
What support services and programming do you hope to take part in at BullNet?
What is (or will be) your social impact?
What are the short and long-term goals of you and your organization?
How do you envision BullNet helping you achieve those goals?
What would you add to the BullNet community?
How did you come to your current position and what motivates you to work in the realm of social innovation and entrepreneurship?
What is your desired level of membership?
□ Full-Time Space (\$250) □ Half-Time Space (31-80 hrs, \$150) Access Space (1-30 hrs, \$75)
□ Community Membership (\$25)

The membership form required a business plan or model and the needs and requirements for members at this stage. Each business model was reviewed by a committee from the BullNet staff to ensure it had a social impact valuation. The criteria was simple –does the business address, in at least a part of their business model, immutable societal, environmental, or economic issues (BullNet website). Members who did not have a social value creation statement were asked to revise and resubmit.

The form asked what support services and programming do you hope to take part in at BullNet? The purpose of which was to understand the level of support the network would need to allocate resources toward for all the ventures it was supporting.

Most importantly, it asked explicitly: *What is (or will be) your social impact?*. That questions defined them a social innovator and was used to create a membership profile (Document 11) to be shared with each of the other members in the network and to the public if so desired.

Two final questions ask participants to describe their orientation toward creating value within the network by asking: *What would you add to the BullNet community?*This question struck the researcher as fundamental because of the value orientation later discovered called the "tertius iungens orientation" which fundamentally gets at how to create value from within a network.

Lastly, members were asked: What motivates you to work in the realm of social innovation and entrepreneurship? This statement helped them to describe their identity as a social entrepreneur.

Membership dues

Members had to choose from what the following levels of membership described earlier. Each membership level had a monthly cost associated as follows:

□ Full-Time Space (\$250)
□ Half-Time Space (31-80 hrs, \$150)
□ Access Space (1-30 hrs, \$75)

☐ Community Membership (\$25)

This level of commitment created revenue for the BullNet, but also described the level of monthly resources they would need to provide in the form of working space and community networking opportunities. This criteria and set of norms were established and re-negotiated through regular conversations with Board Members, Staff, and engaged network members.

Entrepreneurial development programming

BullNet provided or connected members to a host of development activities from regular lecturers from expert faculty from local universities, access to technical training at the Technical colleges, access to local start-up accelerators (like Start-up Stampede), and City-sponsored (Chamber of Commerce) events and resources.

More than 15 of the members, staff and partners in the interviews suggested that much of the talent is drawn to the city because of the universities and college programs. Social innovation hubs need the right people – entrepreneurial, managerial, and technical – to lead and staff them. The city has had success luring or incubating businesses through its major universities, business schools, and/or research labs that are turning out well-qualified people to work these areas. The local Chamber of Commerce, a funder of BullNet, explains it like this:

We support it because we think social entrepreneurial movement in [the city] is a good thing for the community. We like the kind of talent that it's bringing to [the city]. Our focus as an organization is talent and development. We feel it's the key piece that drives strong businesses and strong communities. Rather than spending a lot of time on roads and whether the sewer pipelines are big enough, which are the traditional economic drivers, we focus more on talent. (Interview 15)

The universities, the Chamber of Commerce, the local government enabled workforce development through programs like the "start-up stampede" (Document 6). The start-up stampede is competitive 60-day start-up program where entrepreneurs are given space and access to advice on how to start-up a business. The Director of the program said:

We had 80 applications and over 4,000 hits in the first week on the webpage. We brought in 15 companies and gave them free space and wifi and brought them into the [the city] atmosphere. The idea on our end of the deal was that we hoped people would stay. Nine of the fifteen have stayed. All of them have said they would recommend downtown [] as a place to launch an entrepreneurial business (Interview 17).

This type of entrepreneurial support by the city adds to the ecosystem and conditions surround BullNet. There was a tension in how this was different than BullNet. For example, the director said, "we focused on tech-entrepreneurs as opposed to social entrepreneurs because that was [BullNet]. We didn't want to compete" (Interview 22). This tension around roles and responsibilities of government actors and public/private actors was a common theme across the actors. Interestingly, they are

carving their supportive spaces. For example, a BullNet staff member and the Chamber of Commerce representative suggested as a result of a supportive incubator program which provided a space for the companies selected, four of the companies that were social ventures joined BullNet after they finished the Incubator program (Interviews 15 and 24). As the these tensions are continued to work through, greater role clarity and norms emerged around who does what types of activities –BullNet, the city, the accelerators, the chamber of commerce, etc. BullNet created norms of action to work through these kinds of tensions. This process coincided with the power and meaning creating structures described earlier. The following table is shared below to summarize these data that emerged and were described in this section.

Table 5: BullNet Course-Grained Structure Analytical Map

Master Code	Definition	SubCodes
Meaning	Level of communicating meaning through making sense	 A vision for collective action Sensitivity to local context Co-working Space
Power	Level of power distribution through competing value tension	 Ecosystem of supporting organizations, structures, and policies Government structures and policies Access to financial capital Local universities providing talent and resources Local Developers and Public/Private Partnership

Norms	Level of norm action congruence through personal efficacies	 Network sustainability meetings Social events and gatherings A hub structure Staff and membership criteria Entrepreneurial development program
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In this social entrepreneurship network the course-grained structures and codes identified could be understood through the structures of meaning, power, and norms. It was observed there was more meaning and norms that impacted the nature of the collective interactions among members of the network over those of power distribution. Through these structures we found that network reinforced values and norms. It changed the network patterns by creating a novel social entrepreneurship network and business incubator while providing a focus for collective goals by creating guides and norms for the nature of interactions among the actors.

Fine-grained social structures

Now the analyses turns to a discussion of fine-grained human interaction dynamics (Hazy & Backström, 2014) and their co-evolutionary relationship to coarse-grained social attractors described in the preceding pages. The fine grained dynamics through the two internal structures of Stone's structuration framework provide information and knowledge that we can see used by the agents in the BullNet system in order to choose and form dispositions that will guide them in their actions and interactions and their interpretation of the context. The following table describes the dynamics and their codes of interest for each dynamic. The codes include:

- Internal general dispositional knowledge Encompassing generalized worldviews, cultural schemata, classifications, typified recipes of action, deep binary frameworks of signification, habits of speech and gestures, and methodologies for adapting this generalized knowledge to a range of particular practices in particular locations in time and space.
 - These were further examined through the tertius iungens strategic orientation defined with the following codes:
 - Common strategic work
 - Diverse set of interests
 - Collaboration
 - Common Ground
 - Making introductions
 - Forging connections
- Internal conjunctrally specific knowledge Agents' interpretation of a "positional role" in their environment which is guided by their interpretation of various rules and normative expectations of the collective.
 - o These were defined by the sensemaking and social mechanisms of:
 - Peer support mechanisms
 - Feedback mechanisms
 - Recombination through network weaving
 - Networks legitimizing social value creation
 - Collective solidarity around shared values
 - Learning from failure or pain points in the community
 - Rebuilding a city through changing relationships
 - Back to the future: A history repeating itself

These fine-grained social structures help answer the second research question in this study:

Research question #2: What are the social interactive mechanisms associated with a SEN?

As shared in Chapter 2, mechanisms are small pieces of theory that specify how a specific input will reliably create a specific output (Hedström & Swedberg, 1998, p. 25). The mechanisms associated with social entrepreneurship networks uncovered in this study include both sensemaking and action-oriented mechanisms. The sensemaking mechanisms include artifacts of the knowledgeability of the actor, their history, and memory in this system. The action-oriented mechanisms include the development and nurturing of networks, co-working in a shared space, and other programming described by the participants and staff.

It was observed that the conditions and sensemaking mechanisms enable the action-oriented mechanisms, which in turn transform and create new structures for action. In this section, I will describe the schemata and practices (scripts) that guided the entrepreneur's action through sensemaking. I will describe the sensemaking mechanisms through the schemata or interpretive schemes that were uncovered through the data analyses. The general dispositions, or habitas, characterized by their network strategic orientation will be described as mechanism for such a network. These mechanisms found in the schemata and scripts from members of the network, the staff, and partners guided their actions and the types of structures they put in place.

Tertius iungens strategic orientation

The tertius iungens strategic orientation is a fine-grained mechanism that provides a guide for the nature of interaction in this case study. As discussed in Chapter 2, a tertius iungens strategic orientation, is a "behavioral orientation toward connecting people in one's social network by either introducing disconnected individuals or facilitating new coordination between connected individuals" (Obstfeld, 2005, p. 100). This is similar to Stone's general dispositions or habitas, how one relates to others in a social entrepreneurship network. During the course of the interviews with the members of the network, I probed around six activities related to their strategic orientation prescribed by Obstfeld using the questionnaire found in the Appendix.

In general, members, partners, and staff had a high tertius iungens strategic orientation with some exceptions. I describe my observations in Table 6 below through the words of the participants.

Table 6: Tertius iungens strategic orientation

Tertius iungens factor	Degree study participants	Supporting evidence
	exhibit the behavior	
Common	(strong)	I introduced Toby to Christopher and Allison.
Strategic Work		Toby caught on. He thought everyone was nice
I introduce people		and he's been convinced that joining [BullNet]
to each other who		would be a good thing for him professionally.
might have a		I'm telling him that he needs a video. I think he
common strategic		needs to figure out how to grow his business. I
work interest		think Ben would be a great resource for him
		(Interview 8).

Diverse set of interests I will try to describe an issue in a way that will appeal to a diverse set of interests	(moderate)	In my seminars I try to have something for everybody. They might have a nickel in their pocket, \$100,000 in debt, or \$2M in an investment account. There are some general things that might help everybody. Whenever I give a seminar, I try to imagine the wide variety of people and make sure there is at least one or two things for everyone. Part of my seminar is five tips. One topic is about people looking to maximize your profit. One topic that interests some more than others is Credit Reports. That doesn't really pertain to investment advice, because I felt that everyone should walk away with something. If I can get people in the room, I want them to walk away with something (Interview 12).
Collaboration I see opportunities for collaboration between people	(strong)	I think that happens a lot. We have a MEN (Masters of Engineering Management) team that is working with us on the networking solution. Casey from the Chamber told us they are working with some programmers to layer a networking software over their database. That could be a great collaboration point. They are both working on something very similar. Us and the Chamber both want to find better ways to connect our membership to resources. Those types of things pop up frequently because people are open with us and tell us what they're working on, so we're able to see those connections easily (Interview 24)
Common Ground I point out the common ground shared by people who have different perspectives on an issue	(weak)	Not so much. I think that most people I tend to connect seem to be similarly aligned (Interview 8). I don't really have to point out the common ground, because we are all kind of already "lala" (Interview 9).
Making introductions I introduce two people when I think they might benefit from	(strong)	Just because people actually work in the office space doesn't mean they meet each other. Lightheartedly introducing someone on the phone and two members were sitting next to each other and they hadn't met, so I mimed to them that they needed to meet each other. It was

	1	
becoming		an ice breaker (me miming to them to meet
acquainted		each other) while on the phone so they met each
		other and talked for a while. One entrepreneur
		was working on Entrepreneurship Week and the
		other told her about his venture. Even when
		there isn't a strategic goal, there might be down
		the road. It's better for our entrepreneurs to
		know each other. It makes it better because they
		want to be in the space more because they know
		people as opposed to coming into an
		environment and sitting in a desk and not
		talking to anyone (Interview 24).
Forge	(strong)	I connect BullNet staff to people that are
connections		thinking about joining. People that have a
I forge		global mission, need to get connected
connections		(Interview 9).
between different		I know that anytime I talk to anyone about
people dealing		being in this space and I'll connect them here
with a particular		(Interview 13).
issue.		

It was found that participants tended to forge connections, identify common strategic work interests, make introductions, and find opportunities for collaboration. However, they did not feel a need to find common ground and appeal to a diverse set of interests. From the perspective of a social entrepreneurship network, the general disposition is to forge connections between like-minded people who can benefit from becoming acquainted. The benefits can include strategic business connections or personal connections. Participants "try to connect something to a specific interest of a person, instead of a broader set of interests" (Interview 23).

I found that people do not have to point out the common ground. There is not a need for consensus building. For example, I observed at an Innovation Cafe that there were challenging questions, but not a burning need to find common ground. There are a lot of shared values and shared common ground in the network already; there is not much

disagreement that one has to find the common ground on. I expected to find that a lot of effort was expended trying to find common ground but was surprised to find this was not a significant mechanism to enabling the network.

This method of describing the internal general dispositions of actors provides a way for understanding how they make sense of their role through the feedback received by others throughout their network.

Fine-grained action-oriented sensemaking mechanisms

Next, we'll turn our attention to the internal conjunturally specific knowledge as a sensemaking mechanism which directed people's action during the course of the case study. The action-oriented mechanisms found in this study were around feedback. They included a co-working space that enabled conversations, feedback sessions, meetings, and knowledge sharing. This created opportunities for network weaving and a resulting recombination of knowledge and resources across boundaries. Figure 18 is an infographic taken from a recent video blog created by BullNet that describes the interaction-oriented mechanisms that enable social entrepreneurship actions.



Figure 18: Social entrepreneurship network mechanisms

Peer support mechanism

Positive peer pressure/accountability

The peer stuff is pretty powerful more so than traditional people would give it credit for. It's powerful and sustaining (Interview 21).

BullNet created a framework for people to build a mentoring partnership with other members to develop their businesses and projects. A mentoring partnership offers advice and constructive feedback through listening, encouraging, recommending and sharing experiences and challenges. BullNet serves as facilitator and matchmaker to help set up the right relationships and guide the process. This is possible through events to meet other people looking for peer mentors, through invitations and introductions among members. Staff meet with the member looking for mentoring to understand nature of the project, needs and stage. They look for someone with that expertise in the network to help facilitate a meeting.

One member recalls, "[his mentor] gave me tips on how to charge more and get people to take you more seriously. I needed to work on my business skill set. As we started to work on getting BullNet off the ground, he saw value in what I was doing as an entrepreneurial support system" (Interview 8). Another suggests, "I come here to be motivated, be inspired by others, and to push on when I'm having trouble. It's that shared space. A lot of entrepreneurs feel like you're doing it alone. When you have that community for support it changes your day" (Interview 9). Another stated, "I feel like I get a safe space to be innovative, to think about ideas, connect with other people, and they provide those connections. [BullNet] provides me with connections that give me perspective. Sometimes it's mentorship, and perspective on any of the things I'm working

on. There's always someone there to ask questions. It's hard to put your finger on it" (Interview 14).

A staff member suggests, "we also have a happy hour event every Friday where we show them downtown. On Mondays we do a lunchtime event where the start-ups can talk about things that aren't going well. Their peers help them with their concept. It allows the companies to test their ideas and assumptions, drill down more, sharpen the concept and use the network of their peers" (Interview 15). BullNet provides tools to allow members to inspire and support each other. The potential for members getting value from the network is much higher if each taps in the knowledge and experience of the 150 members rather than trying to provide all the content and value from the staff. Therefore members are often supporting each other.

Feedback Mechanism

Paulo Freire, Brazilian thinker, would say "it's returning to the community codified learning and experiences they generated in an unorganized way". BullNet acts as a mechanism through which members can get feedback on their businesses through interactions with other members, staff, and strategic partners through the structuring mechanisms setup at BullNet including workshops, brown-bag lunches, meeting facilitation, knowledge café's and social events. One member recalls at a workshop that another put on, "I told him that he needs to get feedback from them. It's a useful exchange. You give them something, and you get feedback from them back" (Interview 12). On Mondays BullNet holds hold a feedback session where a member entrepreneur presents their work to a group of decision makers, members, and interested parties

facilitated by the staff of BullNet. On Wednesdays BullNet hosts lunches where members can connect casually and discuss their challenges, pain points, and successes.

One member commented, "It's great that there is a diverse set of members with a diverse set of skills that can provide a more textured outlook on what you're doing" (Interview 4). Another member who recently secured an employment position through his connections at BullNet said, "I now have a solid role at <his organization> which is a large social enterprise in the area. That role gives me visibility and perspective, which I can give to other people in the community. I can be a sounding board for others at a brown bag. You know it's valuable to the entrepreneur" (Interview 14).

Workshops connect members to external parties that inspire their practice and supports peer-learning. Training activities for start-ups are formulated according a bottom-up approach, collecting questions and specific knowledge needs from the start-ups themselves. The members can learn about financial management, project management tools, interdisciplinary innovation, and other kinds of basic or specific training (i.e. like leadership) can emerge into the space and formally or informally communicated to the hosts (i.e. promoting multidisciplinary innovation around a collective-focused questions). Figure 19 shows examples of the workshop opportunities available to members of BullNet. The members had the opportunity to vote on business development, leadership development, legal, and many other options.

Figure 19: Workshop voting at BullNet



The idea of "rapid iteration" and feedback was very clear to the social entrepreneurs. One member provided the example of getting the minimally viable product (MVP) out to the market so one can take advantage of both the reinforcing and negative feedback. The network of social entrepreneurs allows this philosophy, deeply engrained in many of them (especially those that had been a part of a recent accelerator program in the area), to live in practice because of the convergence of entrepreneurs working to create their own MVP's (Interview 2).

Recombination through network weaving

It was apparent that members of BullNet believe that a sustainable community would be created through improving their connectivity – internally and externally – using network ties to create economic opportunities. One member said, "the other thing I'm discovering is that the biggest value isn't just the space (it's just a desk, printing, etc) it's the extra resources: being able to connect with other entrepreneurs" (Interview 1). The

members of BullNet suggest that improved connectivity is created through an iterative process of knowing the network and knitting the network (Krebs & Holley, 2006). This network was like an artist colony of like-minded social entrepreneurs co-creating possibilities together. Transformation that leads to healthy communities is the result of many collaborations among network members. This phenomenon where local interactions lead to larger organizational patterns is similar to the idea of "emergence" from complexity science.

Hub and Spoke Network

The network at the time of this study was a hub and spoke network. Network weavers and BullNet staff began as a hub and spoke network, with the founder and staff as the hub. The founder had the vision, the energy, and the social skills to connect to diverse individuals (entrepreneurs, city leaders, business leaders/developers) and groups (support networks, education consortia) and start information flowing to and from them. BullNet had external links outside of the community (political connections, business connections, and education connections) to bring in information and ideas. BullNet is at a critical phase for the community because everything depends on the founder and staff who are the hub in the network. They are currently working to create multiple weavers in the community, in order to get multiple hub and spoke networks, with some overlap between them (2006, p. 7).

This is the role BullNet took up when it saw the city was home to many small uncoordinated social entrepreneurs and the surrounding network. BullNet brought all of these unconnected groups together around an incubator and a vision for "innovation for the greater good".

Networks support more legitimation

BullNet creates a legitimate space and brand for social entrepreneurs to talk about and perform their work. One member suggests, "the amount of connections you can make to your network is part of your assets as a business owner. The person who has the broadest network wins. Those who are considered good in their field have more than just a few people in their circle. That lends credibility" (Interview 1).

Many of the members suggested this type of credibility comes from many people working toward a common goal. The fact that the network co-evolved through many of the members of the network is emblematic of their long-term commitment to the social innovation causes. The space and the "store front" with the words "Innovate for the Greater Good" provided specific rules and routines for people to associate with their own businesses. Therefore, they were able to make more connections with others, which continued to build.

Networks support Social Capital generation

One member said,

It's almost like your social net-worth. I historically have not been very good at it.

Now that I'm here, I am growing in that area. Networking was my biggest weakness. In the last six weeks, I have done more than I did in a typical six-month period. It's a good thing. It's one of the best values that a place like this has to offer. (Interview 1)

This expression of the value of social capital was typical in almost all conversations. Confirming this, the founder wrote the following in a blog, "conventional wisdom would tell us to speak the loudest, garner the most attention, address the most

people. But modern movements grow by building relationships and empowering those engaged to spread the message in that same way, in a way that instills commitment in the new members" (Document 9)

Knitting the net. The staff of BullNet often discussed during their meetings the level of connecting activities they were performing. Using Ricchuito's pyramid (Figure 20), the staff of BullNet examined their level of interaction during one business meeting that I observed.

Figure 20: Ricchuito's pyramid

Level	Activity
7	Introducing A to B in person and offering a collaboration opportunity to get A
	and B off to a successful partnership
6	Introducing A to B in person and following up with A and B to nurture
	connection
5	Introducing A to B in person
4	Introducing A to B in a conference call
3	Introducing A to B in an email
2	Suggesting A talk to B and calling B to look for a contact
1	Suggesting to A that A should talk to B

They discussed needing to move up to levels 6 and 7. The staff commented that they frequently perform activities 1-5 when they are actively making connections and introducing people. However, they discussed the difficulty (especially as it related to time) on the time commitment to do that effectively across all the members of the network. Therefore, they were devising ways in which they could get the network to make connections and evangelize for them.

The network as an evangelist

The staff of BullNet were looking for ways to involve the network to scale their own work. It seemed as though many in the network would like to participate in it. For

example, one of the members volunteers his free time to host the LinkedIn page. Another member put it like this:

Yes. I want them to just have this always coming out of their mouth -what does it mean -social entrepreneurship. Just have it be the tagline coming out. Anyone who has never come here before, just have them explain it in five seconds or less. It has to be on the agenda just flowing like the elevator speech. I think it's assumed too that people know what it is. I love [BullNet], but one way it could be even better is...I'm just so strapped for time that I haven't engaged as much as I like-- the community aspect of feeding off each other more. (Interview 12)

However, some believe that the staff "can put barriers for me to try to evangelize on their behalf" (Interview 7). The formality, the connections, and the advocacy role all played a part in members feeling left out of strategic conversations. The quickly growing number of members exacerbated this. BullNet staff believe this to be one of their primary challenges in scaling the network.

Recombining knowledge

As a rule, the new combinations must draw the necessary means of production from some old combinations . . . development consists primarily in employing existing resources in a different way, in doing new things (Schumpeter, 1934). Through the networks that have been weaved, the social innovators become a new resource where members can ask a question when needed and shared knowledge when needed. For example, one member shared the following:

One interesting anecdote is that being here and being downtown, I attended the [] local documentary festival. That got my mind going in a different direction. I

started thinking about documentaries and one of my clients have asked me to help write the autobiography of their founder.... That connection came about because I was [at the festival] and then I mentioned to someone [in BullNet] that I was at [at the festival]. She said, "Have you met Phil? Phil is involved with the documentary film studies program at [a local prominent university]." Suddenly this idea was born. I'm going to try to work with him and then pitch that to my client. (Interview 1)

These types of recombinations of new ideas were common in the discussion I had with the early stage entrepreneurs and members of the network. The member goes on to

say:

If I had been sitting at home I would have thought - this is a great idea, but how am I going to execute this? It would have gone in the good idea box. But here, it was possible. Phil may not end up working on the project with me, but he will be able to put me in touch with someone who can. There's grant funding available that I didn't know about that [staff of BullNet] is aware of, there are documentary film students that might be interested. I can see the potential for lots of connections in the future that keeps my creative projects going. They don't feel too daunting at the end of the day. (Interview 1)

The members discuss how they would like to share back-office resources including "counselors", "quality control and feedback", 'interns", "administrative assistants", "legal resources", "contract resources", and "book keeping resources" (multiple). This type of recombination of resources is common of co-working spaces.

However, the members themselves are working on joint projects as a result of BullNet, as well. For example, one member said:

I try to support some of the entrepreneurs at [BullNet]. People with budding business don't have a lot of money to spend on marketing. Early on, I helped to guide and plan the layout of the [BullNet] website and create some of the early content. We did two videos. Both were promoting the entrepreneurial spirit and what <the city> wants to be. (Interview 8)

Knowledge, talent, resources, and idea exchange was the primary reason people felt they received or would receive by being a part of BullNet.

Shared value system around social good

This participants of the study describe that a collective attitude toward innovating for the public good among participants of the research study. The data suggests a collective attitude that legitimated their courses of action based on invoking specific social norms and values that characterized their collective identity. The network is characterized by words like "history," "supportive," "public good," "collaboration," "sustainability," "diversity," "fun," and "accountability." These words described the nature of the collective value system that was uncovered over the course of listening to interviewees discuss the relationship with the network.

BullNet's slogan is "innovation for the greater good." This was evident from the stories of participants (All Interviewees). Shared meaning and mental models characterized a collective attitude and worldview that reinforced the identity of the social movement. It helped to create language around breaking the barriers (innovating) that would allow for improved social outcomes. However, there remained a difficulty

defining the identity of social entrepreneurship discussed by many participants.

Therefore, this value system was described in a collective story around the significance of why they come together in a social entrepreneurship network.

Participants describe that social value was at the heart of why people were attracted to BullNet. There was also a contradiction; they came together because there's a shared view of the world (signification), but there were multiple views (diversity) on how to change it. One member described the shared value system around, "the norms that we would consider socially responsible businesses: trying to reduce waste, keeping it local, advancing just causes, level the playing field. That's also a growing culture in downtown <city>.. I think [BullNet] is contributing to that growing culture, and I also think it's being influenced by that culture. There is a shared value system" (Interview 1).

In describing the collective attitude, members often use language that describes the isomorphic nature of structure and agency. BullNet and its members are a reflection of the community, as the community is a reflection of the members of BullNet (Interview 8). This interaction helped people describe the nature of how their involvement as a social entrepreneur in BullNet, created opportunity for collective impact around these shared values. Another member described:

It's really important for me to feel a part of something. It's hard stuff what we do - starting something that doesn't exist. You need encouragement and cheering on that you can get. It confirms what people say about the millennial generation. We want to feel like we're part of something bigger. It's huge to think that I'm trying to make this work, but if it doesn't there are other people doing things here that

are going to work. It's nice to think that not all of that "save the world" pressure is on me. It's a team mentality. (Interview 2).

Another suggests that there is an emphasis placed on the collective impact over individual impact. "Where it's not just what we're doing but being part of a broader effort to change the way business is done in America, and to use market forces to try to address social issues. We're part of something larger than ourselves as well, which is something that jives with our vision for the world" (Interview 18).

Examples like this, describing worldview, "enable and guide meaningful communication and sensemaking among the agents" (Schwandt et al., 2009, p. 198).

This worldview created scripts for participants to talk about working together and being a part of something bigger than themselves. One member said:

A friend of mine talks about "coopetition". It's the idea that there is a big pie and rather than scramble to get as much of the pie that you can, you try to figure out parts of the pie that someone else can do better. If we all work together, we can share the pieces but not have to worry that someone is going to take away the pie. We're not working against each other. There's strength in numbers." (Interview 8)

A collective solidarity around shared values

A shared social value gave rise to another theme around collective solidarity as a reason for organizing around BullNet. One participant who described BullNet as a gathering place for people that have the same kind of passion and vision, says, "it's more compatible and likely to be supportive of each other genuinely...the likelihood of having deeper conversations is greater if I'm sitting next to them" (Interview 2). These deeper

conversations are possible when the group has a set of deep dissipate structures (Buckley, 1968) that frame conversations. Another participant described the legitimation process, "as you are habituated into these practices, they become second nature" (Interview 3). This is similar to the concept of "entrainment" proposed by Hazy & Uhl-Bien (2013).

BullNet had many kinds of organizations as members with enough difference in perspectives and backgrounds. These differences come together because "everyone who comes through the door wants to do something to improve the world. Also, there's a sense of a global approach. We're a small community but we all look beyond it...there's an excitement that we're all building something together" (Interview 8). Another describes it as "an affinity group of common minded social entrepreneurs in the area that I didn't know before. [BullNet] is the channel through which I get that contact" (Interview 14).

As discussed earlier, I found that people don't have to point out the common ground because of the shared value system and collective solidarity. There isn't a need for consensus building (Interview 2). BullNet was a safe space where you can have diversity of opinions and ideas, but because they are here with the same value system, they don't have to all agree on how we're getting there (Interview 2). One member said, "she was so inspired by her mission and she was going to keep doing it, but suddenly, there were 20 people in a room who all were facing the same challenges and who all felt the same mission driving them to work hard and she didn't have to work alone together and they could address those challenges together (Interview 23).

These deep dissipative structures were summed up by one of the partners suggesting:

At the deepest level, I think this is my purpose. I've always been driven by this concept of social change and how we envision social change in the world. I've tried to be a social change-maker in my own path in my own career. I've been working at the individual level. In my teaching in the last 12 years, I've been able to work with students to unleash their potential as change-makers. I find great satisfaction that comes along with that. But it's still relatively limited: it's a classroom and you're only with them for 1 semester. These are students that are just at the early stages of development. Here, I feel like we have the potential to unleash the potential of an entire community. If the work that we're doing can foster this sense of community and have the collective level of impact that we aspire to, then that would be a positive thing in the world and something I would take great pride in helping to catalyze. (Interview 22)

One of the staff suggested, that:

What we find is that people share a common goal for the community and maybe their industry or experience is different, and that's awesome. That's what makes them useful. But because they share a common goal of <the city> being better, or whatever the common goal is, that is so much bigger. That is so much more of who they are. They want to change the world. By having that more a part of their being, that overpowers whatever their differences are and makes them able to connect and want to help each other (Interview 23).

Learning from failure or pain points in the community

The social tensions described as conditions for action were almost universally understood at the city-level. Participants described the city as a collective organizing

town, which was home to unions and community-organizations. They go on to say that the city was going through financial downturn as a result of tobacco and textile industries leaving the city. In another example of isomorphism, they describe the city as being used to re-creating itself. A few stories typify these ongoing script shared by many of the participants.

Tension leads to community building: Remembering Black Wall Street

The city's rich history of entrepreneurship, innovation, and social action is a major player in the collective schemata created my interviewees. For example, the story of "Black Wall Street" was recalled by over half of all participants without prompting. The story is recounted in BullNet's strategic plan:

After the Civil War, <The city> became a significant center for African American businesses, many of which placed a high value on community by investing profits in community initiatives and social programs, and cultivating a sense of stewardship and responsibility among employees. This focus on social responsibility was unprecedented at the time, and <The City>-based businesses played a substantial role in creating social and economic change in the region.

<The City>'s economy grew dramatically during the late 18th and 19th century, driven by the world-famous tobacco sector and a thriving African-American business sector. The world's oldest and largest African-American owned life insurance company was founded on downtown's [Public] Street in 1898. In 1907,
[a] Bank was founded, and became the largest African American owned bank in the country. [Public] Street was nicknamed Black Wall Street, and Booker T.

Washington called <The City> the "City of Negro enterprise". [One] District was home to theaters, community initiatives, churches, and successful small businesses. [The Life Insurance Company's] first motto, for instance, was "merciful to all," and they were a catalyst for racial, social, and economic improvements in the community (Document 4).

The history of Black Wall Street was recalled by one strategic partner saying:

We had [Public] Street which is known as Black Wall Street. African Americans were creating businesses during some of the most challenging times in our country. They were getting support from white businesses and it wouldn't have been possible in other places in the south. That's our history. It laid the foundation for I think the social entrepreneurship that is happening now. You have companies like [credit union for the under-served] that grew out of downtown ... and some others that started to inspire people about what was possible to create an organization that had a social mission but also a business mission. (Interview 10)

Black Wall Street was described by W.E.B. Du Bois (1912), as a "solution to the race problem" in the country. The African American business community organized their own support ecosystem including banks, businesses, churches, and an academic institution capable of enabling business development for the black community. This African American community worked with the established white community organizations including a local prominent family to create a mutually supportive arrangement, which was novel for a southern city during the time. The story of Black

Wall Street was palpable in the minds of most entrepreneurs starting a business in <The City>.

After hearing the stories from members, I noticed a plaque (Figure 21) in the middle of the city commemorating the event and imprinting it on the minds of most members and represented in the strategic plan of BullNet. The Street where this plaque stands is one block from BullNet headquarters.

A Street in downtown <The City> was called the Black Wall Street because there were black-owned banks and insurance companies. One member said, "to some extent, maybe it was separate but equal mentality but now there is a lot of institutions helping those less fortunate in the community" (Interview 16). Describing:

By 1910, [a prominent local family] controlled about 80% of the cigarette market in the US. They had to hire African Americans to run this. There was a growth of an African American middle class that wasn't seen in most other places in the South. Out of that came the oldest African American life insurance companies, the oldest and strongest African American banks. There was an area downtown called Black Wall Street. There was a growth of African American wealth in the area. That fueled some of the intellectual growth that went on at [the local prominent private university] and in a historic black college. (Interview 19)

Figure 21: Local plaque celebrating Black Wall Street < The City>



One member suggested,

If you've got African Americans in any town, there are the same issues of our history of racism. If you have a town where there have been successful black entrepreneurs who started a powerful network, you have a whole society that has grown up of strong, interconnected people. Their influence on the culture is greater because you have all the different layers in the community connecting. It's about unity and bring people together and community building. (Interview 11)

Talking about Black Wall Street was a script that resonated with the population and was part of their ongoing understanding of their identity during a painful period marked with a financial downturn and an increase in crime. This led to the city being recognized as an "organizing town."

Rebuilding a city through changing relationships

To answer the question, what was the internal conjuncturally specific knowledge about the conditions in (The City), it was found that most people (as was evident in multiple interviews and heard at various meetings) need to reinvigorate and help restore the areas of the city facing economic decline, population loss, unemployment and erosion of social/civic services or other critical issues. Almost universally, there was a view that, for all of their struggles, this city is brimming with potential. In fact, many efforts – some of them grassroots, some more formalized – were currently underway to mobilize residents, reconnect communities, identify entrepreneurial opportunities, and infuse new economic growth.

One member reflected on where the city had come from:

In the city center you had government. Wig shops, a couple restaurants, bail bondsmen, lawyers, hardly anything else. [A] Bank was still in operation. They were the only big player here. There was nothing on the other side of the tracks. <The City's> Central Park area, the old ballpark, was basically scrub-pine. No businesses to speak of. You had a garden shop and a couple of car repair places. The rest of it was scrub-pine, falling down warehouse buildings, and urban homesteaders, as we like to call them. Just homeless people living up there. That was the palette we started with (Interview 17).

When I drove in, I saw an old town. I saw what was left over from big tobacco corporations. There is obviously a feeling from most people that there was "something about starting something new in something old" (personal reflection notes) that attracted people to the city. One member said, "That's the story of the rebirth of <The City>. I think [BullNet's] vision has been to restore new growth into places that were slightly hollowed but not without potential" (Interview 8). For example, one member said: "You have the tobacco campus. We called it that instead of "the innovation campus." Even though tobacco both made and killed <The City>, we still hold on to it. It's part of our past" (Interview 1). Then the tobacco companies came in and created jobs. <The City> decayed after the tobacco companies left, until about 10-15 years ago. Then it started to reinvent itself. When you're going to reinvent yourself, it brought in a lot of different starters. There was pride in downtown <The City>. It was very prosperous. When you create a culture like that and the community gains traction, social entrepreneurship can thrive. That is what is rebuilding this city. I don't think <The City> wants big

industries...we want a diverse portfolio. I think < The City > is becoming known for culture and food. There is life downtown and that makes it fun" (Interview 1).

One member reflected about what it meant for her own business to be a part of the city's revitalization. She said, "when I started my business...one of the questions I was asked is, what will it look like when you're really successful? One of the things in my vision was to have an office in a rehabilitated building downtown and have my staff collaborate around a center table. I don't have my staff but I have everything else.

Downtown is the place to be" (Interview 1).

This perspective was felt by many members. They wanted to be a part of something that was growing and new. The slogan written on the back of one of the old buildings was "Keep the <The City> Cool!". The members of BullNet felt they were a part of that vision. One member said, "I like to phrase it as: we didn't have that river or state capital, but what we had was a lot of cool buildings" (Interview 17). He reflected that they are "taking these old buildings and bringing them back to new life, which is in a way a little bit of social entrepreneurship. We didn't know it at the time. We didn't have a name for this stuff. It seemed like the right thing to do" (Interview 17). Another member and partner reflected:

When the time is right, I quit my day job and moved back to <the city> to help downtown. I felt <the city> was in a similar position, where we had all these empty, underutilized buildings in downtown mostly because the tobacco industry had disappeared but because all the supporting businesses had disappeared as well. I didn't want to see a future where downtown became a bunch of surface parking lots and there wasn't any use for the beautiful historic structures that we

had. I moved back home and started working on a business plan, trying to figure out how to get involved in the redevelopment. (Interview 20).

As a real estate developer, he recognized that the buildings were in really bad condition. Of the 30 properties, 25 were dilapidated, under-utilized properties. They needed a lot of work. He reflected that "we also had a unique situation. When we started the business, we acquired properties and had a serious crime problem in downtown.

When we started our business, we had someone getting shot on Main Street about every six months. It's hard to continue to attract investment when you've got people dying on Main Street" (Interview 20). He said also it is "unique that a lot of the buildings are smaller, which creates some challenges, but it also creates opportunities for smaller, start-up businesses to get involved. It's just a funkier environment where it's better fit for start-up companies than your average corporate office park" (Interview 20). BullNet is now housed in one of the old buildings that this developer helped renovate. He said:

I think city center is the perfect place for that. There are so many different buildings. Before [BullNet] started, I would say [real estate development firm] had ten tenants that were social entrepreneurs in its various buildings. For us, we knew that there would be a demand for this sort of thing if it was created. We could attract additional entrepreneurs. There are already starting to co-locate in city center: the space is cheaper, it's funkier, more accessible, more walkable. But those 10 didn't know each other existed. We knew because we were the landlord of these different properties. It was this weird position to be in as a landlord: you should talk to this person who is in this other building and they are doing something that might be applicable to what you're doing, etc. That's not the

entrepreneurship, I've spent the better part of the last two years helping entrepreneurs make those connections and find financial resources. I was doing some of the things that [BullNet] is now a formal outlet for. (Interview 20)

The key take-away from this is how the nature of the relationships changed as they moved from the real-estate developer informally playing the role of the "connector" to the BullNet playing that role more formally.

Another member talked about building on the bones of the city of the city. He said, "I did a documentary for the Convention and Visitors Bureau on adaptive reuse architecture...[the architects] have restored the buildings with great care and integrity" (Interview 8). Moreover, one of BullNet members said, "I think the consumers [in the city] here are green minded. They are excited to see a LEED facility, restoration of buildings (Interview 3).

One member reflected:

Because <The City> had a rough background, the prices to be downtown were relatively low. Start-ups were able to come in a low cost and see a huge amount of opportunity to transform the space around them. Entrepreneurs are able to rehab some of the buildings and do it in a way where they can put their unique fingerprints on it. They wanted to have exposed beams, natural light, etc. They like making something out of nothing. This has been going on for the last five years and it's monumental (Interview 15).

The revitalization of the city was part of what was discussed at the community meetings I attended, as well as the tension needing attention in their strategic planning documents, and relayed in almost every interview with members, partners, and staff. *Back to the Future: A history repeating itself*

As was evident in interviews with the thought-leader, local university leadership, the founder, and strategic partners, there was a shared view that they were "reliving" an event that had already taken place in the area. This area has already seen the phenomenal growth of one Research Park. One member said, "over the last 50 years, the Research Park, consisting of hundreds of companies, tens of thousands of jobs, and billions in revenue and payroll, has become a marvel" (Interview 16). The thought-leader wrote a white paper suggesting they could create a new social entrepreneurship park, that would be "adjacent to [a research park] and could work with the leaders to develop the right institutions within this area to attract others. In addition, many of the companies in the park have charitable and community development projects under way. They might become early tenants in some of the space as they explore areas such as Corporate Social Responsibility and strategic philanthropy among other like-minded companies in a closer community" (Interview 1). In my interview with him, he said, the very first thing that happened was the creation of a philanthropic Foundation. He suggests BullNet is equivalent to the this Foundation in that it "is a convener of folks who support the idea" of [a research park] in the earlier case and of social innovation now.

One member and partner talked about how this kind of park could impact his company, "the more the <The City> is seen as the hub for social entrepreneurship in the country, that attracts more people to either stay after graduating or relocating here, which

gives us a broader talent pool to recruit for. Those are also the first people who are going to want to come work for us" (Interview 18). A strategic partner said:

In the late 1950s when [parts of the city] came together and set aside a whole area for innovation and entrepreneurship, which became Research Park. It created an area and zone in which we could encourage innovation. A lot of those technologies were things like Astroturf, but biotechnology came out of it, AZT to treat HIV came out of it. It's an area with a culture and infrastructure to support innovation and entrepreneurship including not just commercial but social. (Interview 19)

Many participants had this idea of seeing a vision for the [a research park] out of the tension around economic necessity that was going on at the time. It seems in their eyes, history was repeating itself. "Similar to [the research park], you need an anchor or a hub. [BullNet] came out of this idea that there was a lot of activity going on, but how do you create a model that captures these social innovators/entrepreneurs? We gave them the support they needed to launch their ventures" (Interview 19). The label, Research Park, legitimized the area so that new members could better understand what was going on. In a similar vane, BullNet is doing the same thing.

These stories shared by the participants show the context-specific knowledge about events and event sequences. Through the stories of the participants it was clear that there was history guiding and legitimating the actions of the members of BullNet. The purpose of sharing these stories was to describe the norms for actions (legitimation), the rules for sensemaking (signification), and functions of power (domination) in the social

entrepreneurship system. These will be further discussed in Chapter 5. The following Table describes the fine-grained social structures identified in the case.

Table 7: BullNet Fine-Grained Social Structures Analytical Map

Master-codes	Definition	SubCodes		
Internal general dispositional knowledge	Encompassing generalized worldviews, cultural schemata, classifications, typified recipes of action, deep binary frameworks of signification, habits of speech and gestures, and methodologies for adapting this generalized knowledge to a range of particular practices in particular locations in time and space (Stones)	Tertius iungens strategic orientation including:		
Internal conjunctrally specific knowledge	Agents' interpretation of a "positional role" in their environment and is guided by their interpretation of various rules and normative expectations of the collective (Stones)	 Peer support mechanisms Feedback mechanisms Recombination through network weaving Network legitimizes social value creation Collective solidarity around shared values Learning from failure or pain points in the community Rebuilding a city through changing relationships Back to the future: A history repeating itself 		

Dynamical Social Tensions

Lastly, we turn our attention to the dynamical tensions that have been alluded to already in this research. Participants struggled with managing the inherent tensions found within the course-grained and fine-grained structures. Through analyses of the transcripts, I found the following social tensions tied to a struggle or pain point in relation to being connected to the social entrepreneurship network. Social tensions represent the "go" and "energy" for change within all social systems (Buckley, 1968; Schwandt et al., 2009; Wasden, 2010). Social tension is compatible with structuration theory (Barley & Tolbert, 1997; Giddens, 1984; Stones, 2005) where agents in organizations reacting to the tension associated with the action and institutional realms stretch and break social structures. This is a dynamical social tension that puts pressure on individuals to change current organizing structures to take advantage of (exploit) a gap or need in society. This creates opportunity for change. The following four dynamical social tensions were "worked through over time" by the participants in the study.

- Role of the social entrepreneur the tension the social entrepreneurs were embroiled with in understanding their place within BullNet and within the larger community of "do-gooders"
- Value orientation and ideology the values that members of BullNet tended to believe and struggle with over the course of their involvement with the network
- Function of the network the conflict that members and staff of BullNet had as they tried to grow the network and provide value to the members
- Commitment over time the inherent tension the BullNet members felt in creating social value and sustaining a business

The following Table describes the nature of these dynamics as were evidenced by participants during the course of the study.

Table 8: Dynamical Tensions

Dynamical Tensions Master Codes	Meaning SubCodes	Power SubCodes	Norm SubCodes
Role of the Social Entrepreneur	Self vs CollectiveGlobal vs localDoing well vs doing good	Government control vs Entrepreneurial freedom	
Values and Ideology	Business values vs family values	 For profit vs Non-profit Financial resources vs Social value Private vs Public Investment in low income communities 	 Scale vs Value Political left vs political right Racial tension
Function of the Network	 Current stakeholders vs New constituencies Getting stuff done vs Creating a community Building new members vs Supporting existing members Time vs. Need 	 Policy vs action Organizational inertia vs Innovation 	 Exclusivity vs Inclusivity Accelerator vs Incubator Staff time vs supporting more membership Traditional vs Start-up Traditional disciplines vs Growing a new discipline Replicating vs Focusing

Role of the Social Entrepreneur

Through this research, I found a number of tension narratives found in the collective interactions of members of the social entrepreneurship network's worldviews, competing values, and personal efficacies as it related to their role in the network. The role of a social entrepreneur was defined in this research by the following tensions.

Tensions in creating meaning around the Role of the Social Entrepreneur

"In some ways, the way we, as social entrepreneurs, view the business world is similar. That's why we're here. As far as our worldviews, just from casual conversation I can tell we don't all believe the same things" (Interview 5). This quote from a member of the social entrepreneurship network summed up how tensions around the role of the entrepreneur were signified throughout the network.

These tensions around worldviews of social entrepreneurs are found in the duality associated with self-identity and collective-identity, global versus local perspective, doing well versus doing good.

Table 9: Dynamical tensions of Role of the Entrepreneur (Meaning)

Self-identity	Collective-	A lot of times people try to find people just like	
	identity	themselves for advice or help and usually that's helpful	
		because if they're just like them, they already know the	
		answer they're going to get. What we find is that people	
		share a common goal for the community and maybe their	
		industry or experience is different, and that's awesome.	
		That's what makes them useful. But because they share a	
		common goal of <the city=""> being better, or whatever</the>	
		the common goal is, that is so much bigger. That is so	
		much more of who they are. They want to change the	
		world. By having that more a part of their being, that	
		overpowers whatever their differences are and makes	
		them able to connect and want to help each other	
		(Interview 21)	
		It's like, "yes we want social justice or we want to	
		change some issue" but the biggest thing is "I myself am	
		going to do that. I'm not going to wait for someone else	
		to do it. I'm not going to put something out there and	
		hope someone acts on it. I myself am going to be the one	
		the makes it happen." That kind of action orientation	
		really connects people. (Interview 23)	
Global	Local	Everyone who comes through the door wants to do	
		something to improve the world. Also, there's a sense of	
		a global approach. We're a small community but we all	
		look beyond it. (Interview 8)	

Doing well	Doing	Social Entrepreneurs and young people coming up in the
	good	21st century don't see the dichotomy between doing well
		and doing good, as they say (Interview 16)

Tensions in power dynamics around the Role of the Social Entrepreneur

Structures of power are the institutionalized mobilization of power, which takes two forms (Giddens, 1984). First, resource-allocative power structures involve the institutionalized distribution of material resources, such as goods, objects, and property, including the way that different groups access and deploy those resources. Second, authoritative structures of power refer to the institutionalized authority relationships involved in mobilizing power, which are reflected in the way that the interests of different groups are represented within a social system. These two structures of power and authority over people and resources were found in the social entrepreneurship system especially as it relates to the role of government both city and state (delimited by this research). Participants struggled through the following dynamical tension associated with power dynamics in the Role of the Entrepreneur.

Table 10: Dynamical tensions of Role of the Entrepreneur (Power)

Government	Entrepreneurial	Somewhere we have to have a balance
control	Freedom	where the government as an entity that helps create an environment for certain types of economic growth and development but you also need entrepreneurs free to innovate and be creative (Interview 16).
		That is the trade off of being free-wheeling- you don't have necessarily the government institutional support. (Interview 16)

Value orientation and ideology

The values that members of BullNet tended to believe and struggle with over the course of their involvement with the network created significant tension. The value orientation of the network was described in the following dynamics tensions associated with meaning.

Tensions in creating meaning around their value orientation and ideology

For example, when describing the network, one participant said, "I feel there is a shared language and values" (Interview 2). Another suggests, "We both come from different backgrounds but share similar values" (Interview 5). Another explaining why he chose to join his organization said, "I picked a program focused on institutionalizing personal commitments: leading based on deeply held values and using the knowledge of how business and enterprise and organizational forms work using that to try to make a positive difference in the world" (Interview 18). This tension was found, "when they launched, at the outset it was more about a good product, fun place to work (they were young), and a business that could scale. Over time, they began to seek out ways to bring the operations of the company more in line with personal values and things they were involved in and how they saw the world outside of <the company>" (Interview 18).

Table 11: Dynamical tensions of Value Orientation and Ideology (Meaning)

Business	Social	We're trying to take these concepts and put them in the
value	value	context of values that aren't necessarily green. So family
		values, economic. Working with Chambers of Commerce but
		having an environmental and social program has been a
		challenge from day one. How do you explain the value? You
		can't be too radical or philosophical. This has to relate to the
		bottom line. (Interview 3)

Tensions in power dynamics around their value orientation and ideology

Tensions associated with power and resources were found in dualities associated with for-profit and non-profit business models, private/corporate and public/social value creation,, political left versus political right, and investment in low-income communities. Participants worked through the following dynamical tensions associated with power dynamics:

Table 12: Dynamical tensions of Value Orientation and Ideology (Power)

For-profit	Non-profit	On the earned income side, there is often a
r	r	mission-money tradeoff. If it's truly going to
		be an earned income venture that may be
		mission related, finding folks who have some
		of the business skills or at least the
		operational skills to launch and run that
		venture can be challenging, especially if you
		don't have folks inside the organization with
		that kind of experience. The governance
		issues become a real challenge: how one
		prioritizes outcomes and impact, and how
		earned revenue needs to be balanced with the
		social or environmental outcomes that you're
		trying to achieve. Governance has always
		been fascinating to me. (Interview 19)
		Right now you have the traditional,
		capitalism market of profit maximization and
		on the other side is totally charitable. This
		world in between is trying to find its way
		(Interview 16).
		We're up against a lot of challenges: not just
		the membership driven stuff, and
		entrepreneurial support, but our sector in
		general. We're a new sector and a lot of
		people don't understand it. (Interview 24)
Private/Corporate	Public/Social	Does this work? Is there a future to this kind
		of business model? In the food sector and
		trying to do something that is not industrial
		foodthere is a reason food became an
		industrial productfor efficiency and we are
		trying to take it back to the way it was and
		it's not very economically efficient. I don't
		know if it's possible to do it with more

		integrity. The same set of questions come up from different models of social entrepreneurship. You're trying to get away from the corporate versions but there are a lot of good reasons for those corporate versions. (Interview 13)
Financial resources	Social value	A lot of businesses see the value, but they haven't realized the value to the point where they are willing to put a couple thousand dollars toward it. The Chamber also pushed back - this is more expensive than we thought. It's working for me in that I know people realize the value, but it's not working for me in that it hasn't brought a whole lot of new business (Interview 8)
Investment in low-income		I think there are barriers to investment and
communities		helping spark turnaround in east <the city=""> and other historically disadvantaged, largely minority areas of <the city="">. (Interview 18)</the></the>

Tensions in norms around their value orientation and ideology

Participants worked through the following dynamical tensions associated with the norms of legitimation.

Table 13: Dynamical tensions of Value Orientation and Ideology (Norms)

Scale	Value	There are two things. One is how do we make sure we're providing fantastic value to every one of our members of our community. As we grow, the biggest concern I have is that we
		hit a tipping point where it's too big to offer a sense of intimacy, connection and relationships that the wheels come off the bus.
		We hit this moment where it's too diluted, we're not able to provide valuable support in the process, and as a result, people
		don't see value and our retention of membership goes off a cliff.
		Imagine we have 150 members (80-90 organizations) and if we could scale that in <the city=""> and take it across the state, then</the>
		potentially some powerful change at the community and state level to make it all come together. The danger is that you scale
		too much, spread too thin and it dilutes the power of what you're
		trying to get accomplished. (Interview 22)

Political left	Political right	In terms of the players that are at the table, we are fortunate that there is local and state support for these efforts. It probably would help to have the legislature flip; there is a lot that could be done without appropriations and investment in public dollars. It would be helpful if we want to create a Center for Social and Sustainable Enterprise or something like that that really offers state-wide support for organizations like [BullNet], whether it's research or public policy or access to capital, it wouldn't hurt if there were opportunities for outlays of the public sector, which partly is a reflection of the economic climate, and also a
		reflection of the current leadership in the legislature. I guess that is one thing that could change. (Interview 18)
Racial	tension	I think the existing economic and racial issues that still exist in <the city=""> can be a barrier. When you have organizations like [BullNet] who try to bring together leadership from different communities, that is essential. That has been a barrier in <the city=""> for a long time. You need individuals and organizations who are intentional about breaking that down, who are bringing together the initiative capital, which is an umbrella organization of CDC's, which are primarily African American led. Latino Credit Union in <the city="">, Self Help, and connecting those to companies like ours. I think those sorts of connections need to happen more. Some of those folks became the leaders of the civil rights movement and led to the sit ins in Greensboro. It's not a surprise that Self Help, the largest nonprofit community financed institution in the country is here. If you look at what underpins the founding of that, it was growing up in NC and seeing the inequities between African Americans and whites in rural areas (not in <the city=""> but farther out). (Interview 18)</the></the></the></the>

Function of the Network

One of the most significant tensions associated with BullNet was defining the Function of the Network. The conflict stemmed from the members and staff of BullNet as they tried to grow the network and provide value to the members at the same time. This left questions as to who and when they would focus their resources and influence. This lead to questions about how the network supports social entrepreneurs in the community.

Tensions in creating meaning around the Function of the Network

The following tensions were described by participants as the tried to creation meaning around the function of the network.

Table 14: Dynamical tensions of Function of the Network (Meaning)

Current stakeholders	New constituenc ies	We have to be able to serve them. I think there are a number of organizations that are very aligned with us in terms of our values, would benefit from an event on innovation and impact. They don't see themselves when they look in the window. We have to change and broaden our constituency. (Interview 22)
Getting stuff done	Creating a community feel	Getting stuff done and keeping the community feel at the same time. (Interview 24)
Building new members	Supporting exising members	Everyone has a threshold and how many they can accommodate at a given time. A lot of my energy is going towards building instead of supporting. It goes both ways and overlaps. It takes manpower. (Interview 4).
Time	Need	There's a lot of turnover in the city so each time you're almost starting your conversation from scratch as you're working on these public/private partnerships. That time lag really impacted us. We had projects and financing lined up but we couldn't get the public/private partnership done in time for some of these projects to move forward. (Interview 20)

Tensions in power around the Function of the Network

Participants worked through the following dynamical tensions associated with where power existed within the network:

Table 15: Dynamical tensions of Function of the Network (Power)

Policy	Action	I've always felt that policy plays a very
		important role, but I'm getting into the more
		micro parts of that. The supply side.
		(Interview 22)
Organizational	Innovation	That organizational inertia to doing new
inertia		things in new ways can be a challenge. It
		was interesting to work in the pre-launch

stage. If you could design an organization up front, you could have the opportunity to
make an impact. That's on the innovation side. (Interview 19)

Tensions in norms around the Function of the Network

Participants worked through the following dynamical tensions associated with the norms in the functioning of the network:

Table 16: Dynamical tensions of Function of the Network (Norms)

Exclusivity	Inclusivity	If you think about the diversity of the networks engaged, it's a concern I have. It could eventually be a tension. Some of the grassroots networks are not as involved yet as they could be. (Interview 19) People give preferred treatment to people that are part of
		the club. (Interview 4)
Accelerator	Incubator	"If we pick the innovators, nourish and reward them, then we can have the greatest impact." or "Wellfacilitated, diverse, data-endowed cohorts (of practitioners, policy makers, donors, NGOs, etc.) can learn and improve. (Interview 22)
Staff Time	Supporting more membership	Capacity - I think we need another full-time person to support it and another to build it. I think my job needs to be full-time (Interview 4)
Traditional	Startup	They are working exclusively with start-ups; we're working with mature businesses. (Interview 3) A lot of people don't classify this as real business. It's a battle between the old and the new. Some people think this is the new business model, and you have those that are entrenched in the old way of doing things. They are not ready to give that up. A lot of folks recognize, the traditional way of doing things will not suffice in the 21st century (Interview 16)
Traditional disciplines	Growing a new discipline	There are definitely challenges to that as a new field, very few outlets for publication, and few incentives for young academics to focus on this. The supervising tenure track faculty might not feel it's a good use of their time. Very few academics that can supervise doctoral candidates, very few programs, these sorts of things. There are a lot of barriers to the growth of the field. Certainly there is dramatically growing interest from around the world. (Interview 19)

Replicating	Focusing	I think the priorities are enabling entrepreneurship in	
		<the city="">. There is a lot of attention by [BullNet] staff</the>	
		to grow [BullNet] in other communities. I think they are	
		dabbling in other areas that are less clear in how it ties	
		into the community and what the benefits are to those	
		that are paying dues. (Interview 15)	

Conclusion

Social tensions created opportunities for BullNet to emerge as a network to support "innovation for the greater good". The network provided the social mechanisms needed to lower the probability of failure and increase the level of fine-grained interactions in order to extract value. These conditions, mechanisms, and interactions enabled knowledgeable actors to change course-grained structures over time. In full circle, the course-grained structures signify a social entrepreneurship networks' existence by creating meaning and identity. Specific community actors who legitimize a set of norms that enable collective action distribute the power. Through an approach that encourages network weaving, the actors create solidarity around a shared set of values through which they create collective impact.

In this study, two critical structures of a social entrepreneurship network were found. The first are the course-grained structures that create the conditions for existence for the network as a whole. The second were the fine-grained structures that enable people to be more knowledgeable about the internal conditions that are governing their action. These structures governed which actions were sanctioned from the course-grained structures. Participants made sense of this through a tertrius iungens strategic orientation and through ongoing feedback/sensemaking processes. This process between the conditions (external structures) and knowledgeable agents (internal structures) created a

dynamic tension. The third finding related to the dynamical tensions between norms, values, and power tensions. These were found as a mechanism that gave energy to the emergence of a network of social entrepreneurs. The following table describes each of the findings as it relates to the primary research questions.

Table 17: Summary of Findings for Primary Research Questions

		Research Questions		
		What are the contexts and conditions associated with social entrepreneurship networks?	What are the social and action-oriented mechanisms associated with social entrepreneurship networks?	
Course-grained structures of signification and meaning Course-grained structures of domination and power Course-grained structures of domination and power Course-grained structures of legitimation and norms Course-grained structures of legitimation and norms Course-grained structures of legitimation and norms Vision action Sensiti contex Local provid Local provid A soci entreprinetwork Netwood meeting Social gatheric	structures of signification and	Vision for collective action	Working through dynamical tension of meaning-making (See Dynamical Tension Findings)	
	structures of domination and	organizations • Supporting government policies • Access to financial capital • Local universities providing talent	Working through dynamical tension associated with power dynamics (See Dynamical Tension Findings)	
	 A social entrepreneurship network hub structure Network sustainability meetings Social events and gatherings 	Working through dynamical tension associated legitimation and norms (See Dynamical Tension Findings)		
			 Tertius iungens strategic orientation Ongoing sense-making process of "working through" dynamic tensions 	
	Dynamical Tensions		 Role of the Social Entrepreneur Values and Ideology Function of the Network 	

Chapter 5: Interpretations and Recommendations

"In a world beyond aid, assistance would be integrated with – and connected to – global growth strategies, fundamentally driven by private investment and entrepreneurship...the goal would not be charity, but a mutual interest in building more poles of growth. The rising economies will be joining new networks – of countries, international institutions, civil society and the private sector – in diverse combinations and changing patterns...these new networks are displacing the old hierarchies."

Robert Zoelnick, President of the WorldBank, 2011 Address to George Washington University

At the beginning of this study, we attempted to answer this question, "How can social enterprises maximize their impact without having to achieve the financial scale that would make them major players in whole sectors of the economy" (Kumar, 2010)? Through this research we have confirmed, indeed, the answer lies within the network – the social entrepreneurship network. Social entrepreneurship networks (i.e. TheHub, Social Venture Networks, Idea Village) are an emerging form of organizing collective effort to change society through growth and development of double and triple bottom-line businesses. This research examined the requisite context, conditions, and social mechanisms necessary to create and scale social value in a network of social entrepreneurs.

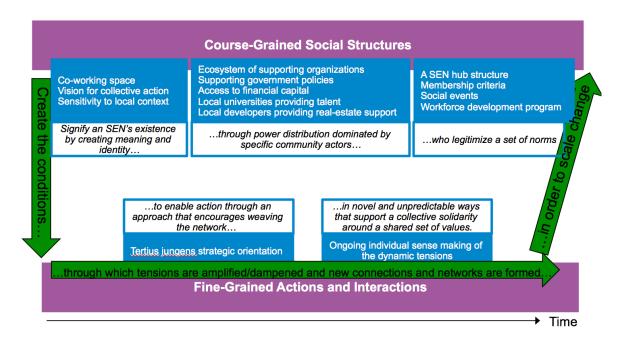
This research described the nature of a generative network of social innovators through the web of connections between actors in the network. This research identified the context, conditions and social mechanisms that enable the emergence of a social entrepreneurial network. The analysis described the opportunity tensions, informational differences, network strategic orientation, and social mechanisms. These descriptions helped to build better understanding of how social entrepreneurship networks are created and scaled.

Summary of the Empirical Findings from Chapter 4

This research sought to understand the emergence of new organizing approaches for enacting social innovation. Through the analyses of the data, this research found that, when innovation is a priority, it is necessary to create novel inter-organizational network forms to match the environment in which they are operating. Emergent forms of organizing were considered through the requisite conditions and social mechanisms necessary to create and scale social value in a network of social entrepreneurs. The conditions included the constraints and influences imposed upon particular agents by external structures (seen in the Figure 22 as "course-grained social structures"). The social mechanisms studied (seen in Figure 22 as "fine-grained interactions") were identified through the sets of internal assumptions that specified how people would interact and reliably create a specific output through the network.

The results of this study are described in Figure 22.

Figure 22: Visualization of findings



The course-grained social structures found in the study through a description of the meaning, power dynamics, and norms create the conditions through which tensions are amplified or dampened and new connections and networks are formed in order to scale change.

Course-grained structures

The conditions that signify an SEN's existence are created through (i) how it creates meaning, which is the essence of its identity. This research found that these conditions included the co-working space, the vision for collective actions, and sensitivity to the local context. Through (ii) the power distribution dominated by specific community of actors and their policies, the network created its authority to take action. These actors and policies included the ecosystem of supporting organizations, supportive government policies, access to financial capital, local universities providing talent, and local developers providing real-estate support. The (iii) network was legitimized by a set of norms, which were found in the SEN Hub structure, membership criteria, social events, and commitment to workforce development.

Fine-grained actions and interactions

Participants in the network (iv) make sense of the environment in order to scale change. Participants' ongoing sensemaking was enabled through the fine-grained actions and interactions. These are described through (v) a process of *working through the dynamic tensions* created by the means, norms, and power dynamics. Participants worked through this process through the use of their network. Members shared a common characteristic called a (vi) tertius iungens strategic orientation. It was found that members of a social entrepreneurship network work together for a common good because

they see possibilities and work creatively and persistently to make possibilities real. They know how to combine knowledge, resources, and talent to enact change. Members of a social entrepreneurship network instinctively find reasons why things can happen and work to coordinate and mobilize the people and resources in order to persist against the odds. Ultimately, the members of the network decide to participate in the network because they find it a beneficial place where they could lead with the power and influence of others in order to enact social change. In addition, they make sense of the environment and believe they can change the economic, political, and operational context that constrain the traditional, so-called, "do-gooders." They provide generative leadership to bring diverse parties to the table, actively combine knowledge and resources, and create an environment to take joint action. They build bridges for the purpose of the collective value. More often than not, they lead with no formal power or authority, but (vii) work together in novel and unpredictable ways that support a collective solidarity around a shared set of values.

Dynamical Tensions

This study found that in the context of social innovation, diversity of information inside and outside the system creates dynamical tensions, which are described in the ongoing dynamic sense-making processes found in the fine-grained interactions of actors in the study. These tensions create opportunity. As a result, they can be described as opportunity tensions, which forces adaptability through a dynamic and co-evolving network of social entrepreneurs. Networks using "combining strategies," described in this study as a tertius iungens strategic orientation, offer beneficial interchanges of knowledge and resources between agents.

Recombining knowledge and resources supports the cooperative infrastructure needed to create shared social value and a collective identity. This research found and describes the nature of each construct. The opportunity tension and informational differences focused on the level of analysis between the entrepreneur and the institution (specifically BullNet) they inhabited. It was found through the tertius iungens network orientation the degree to which the social network actively recombines knowledge and resources is necessary to encourage the creation of novel organizing structures for social change, like BullNet. However, the degree to which they create a collective identity that holds the network together can have a negative impact on the novelty generation process. This tension was discovered across multiple levels and contexts in the study.

The findings suggest that social entrepreneurship networks are part of a complex process that unfolds over time involving many highly diverse groups, including user communities, provider organizations, non-governmental organizations, funders, and policy-making groups. Through this research, you can see how closely this data fit such complexity theory concepts as emergence and recombinatory practices of networks. Thus, the analysis yielded a set of concepts grounded both in theory and in data.

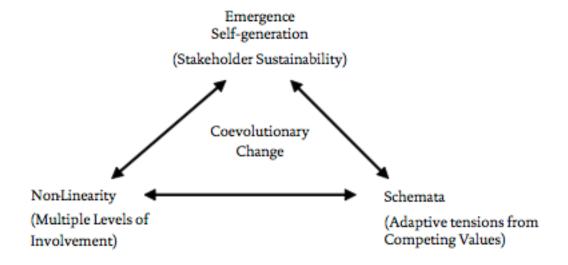
Discussion of Results

Complex adaptive systems theory suggests the collective is comprised of agents (i.e. social entrepreneurs) that are self-referential and reflexive (i.e. creating conjuncturally specific knowledge) and are responsive to relating with each other (i.e network weaving/interacting) in often radical and unpredictable manners (i.e. reinventing organizations for the purpose of social change).

Opportunity tension and informational differences can be examined as context and conditions, which put constraints on the system. These constraints enable what kinds of recombinatory actions can occur and shift the system toward a new structure. Operating between the constraints and the actions are agents with differing combining strategic orientations, which also affect the agents' actions.

As suggested, this process of co-evolving network structuring organizes a social entrepreneurship network to take hold in some new way, fall apart, or become routinized. These institutional and human action systems affect the types of network structures that are formed. The way a network co-creates structures affects how the agents in the system co-evolve to create novel solutions to complex problems. Therefore, this research examined the interconnection nature of non-linearity, emergence, and schemata (Schwandt et al., 2009, p. 207) found in the following Figure.

Figure 23: Interconnected nature of non-linearity, emergence and schemata



This model is useful in organizing the theoretical interpretation of the dynamics of emergence of a social entrepreneurship network. The *non-linearity* was seen through the fine-grained interactions that were enabled through the network. The *emergence/self-*

generation was seen in the course-grained structure that ratcheted the system to the new organizational form. The *schemata* were described through dynamical tensions that created opportunities for hyper-emergence.

The following table describes the conclusions arrived at as a result of this research into social entrepreneurship networks through the dynamics associated with coevolutionary change.

Table 18. Dynamics of emergence of a social entrepreneurship network

Conclusions supported by the Findings	Co-evolutionary Change Dynamic	
1. Fine-grained interactions are enabled through networks which provide the social mechanisms needed to lower the probability of failure and increase the level of interactions in order to extract value		
a. Creating a collective identity around innovating for the greater good	Non-linearity (Multiple Levels of	
b. Lowering the probability of failure through safety		
c. Amplifying informational differences	Involvement)	
d. Enhancing the tertius iungens strategic orientation is a mechanism that enables collective interactions		
e. Network weaving, which creates opportunities for recombination of knowledge and resources		
2. Course-grained structures are ratcheted as a result of fine-grained interactions through the conditions and mechanisms that enable knowledgeable actors to change course-grained structures over time		
a. Collective structures emerge through the interaction of knowledgeable actors in the system	Emergence/Self- generation (Stakeholder Sustainability)	
b. Identity is created through the stories of knowledgeable agents		
c. Networks co-create social norms and interpretive schemas which, in turn, change the "context"; feedback loops encode the new knowledge back into the larger system		
3. Dynamical tensions create opportunities for hyper-		
a. Tensions are necessary, but not sufficient condition for the emergence of a network of social entrepreneursb. Social tensions create opportunity for hyper-emergent	Schemata (Adaptive Tensions from Competing Values)	
organizing around innovation for the greater good		

This research found that the context, conditions, and social mechanisms provide three interrelated contributions to our understanding of the dynamics of a social entrepreneurship network. While this descriptive study of human interaction is not an effectiveness or outcome study of social entrepreneurship, the following conclusions were supported based on the evidence uncovered.

Conclusion 1: Fine-grained interactions are enabled through networks

Fine-grained interactions are enabled through networks, which provide the social mechanisms needed to lower the probability of failure and increase the level interactions in order to extract value

The emergence of the social entrepreneurship network was a result of lowering the probability of failure and raising the level of interaction among the participants in the network. These two functions allowed participants to extract the value from the finegrained interactions using the social mechanisms uncovered in this study. Hazy suggests that [social] change is driven by "changing the rules that govern the nature of connections and exchanges between individuals" (Hazy & Uhl-Bien, 2013a, p. 2). This is accomplished through the enablement of a network. This research uncovered that SENs provided the following social mechanisms. The social mechanisms included (i) creating a collective identity in the face of diversity, (ii) creating a safe-space to learn and explore, (iii) encouraging a tertius iungens strategic orientation, and (iv) active network weaving. Social entrepreneurship networks require a collective identity around innovating for the greater good

The BullNet slogan, "innovation for the greater good," is focused on attracting social entrepreneurs to the downtown area. New recombinatory processes including

business incubators with co-working space, local developer funding on joint projects, social venture start-up events sponsored by the Chamber of Commerce, networking events hosted by BullNet, and others enabled the complex set of interactions between these diverse partners who had little opportunity to convene otherwise. A shared sense of social value was found where the individuals and the collective created meaning through an ongoing, enacted, retrospective, and social process that helped them create this identity, by extracting cues in order to create plausible explanations for the purpose of the social entrepreneurship network (Weick, 1969).

Lowering the probability of failure through safety

The mechanisms to lower the probability of failure included creating a safe-space. A member thought of the space as "being able to bring your full self to work" (Interview 10). Another member said, "BullNet's core offering is the provision of a supportive working environment for entrepreneurs" (Interview 13). It was clear that it was important among the members, staff, and local community to create a "safe space" where diversity was encouraged and enabled. In fact, many worried that BullNet was becoming too "university-focused" and needed to bring in the voices from the under-served parts of the community, the part BullNet was designed to enable. Through the co-evolution of BullNet, members from the community including those with different racial, socioeconomic, philosophical, education, and business interests was encouraged and enabled. Therefore, it was found that tension from the diverse actors and perspectives was a necessary condition for the network to emerge (deviation amplifying feedback). This is an example macro change due to micro interaction.

However, over time the process of working through that tension, or as Luscher and Lewis (2008b) describe as "sparring," created deviation dampening feedback, and thus "had the effect of dampening critical inquiry in the name of collective solidarity" (Schwandt et al., 2009). In order for the network to self-sustain a collective identity for social innovation was important to ensure enough new knowledge was entering the system, challenging assumptions, and creating opportunities for emergent organizing. This dilemma was fundamental to the ongoing interactions among the agents working in the system. The result was an attention to seeking out alternative view points by convening with new actors into the system that challenged some of the members sensibilities about the purpose of BullNet, the needed deviation amplifying feedback.

Consider, for example, our social entrepreneurship network, BullNet, with a dense network of like-minded individuals. Many of the members described it as a friendship network who are likely to share likes and dislikes, and they primarily talk about what they are familiar with. Through this type of dense embedded network, the chance that differences will be expressed is low, and consequently any new information flow that comes from sources internal to the cluster will be low. For the network to be sustained, however, new information is needed if the group has to fulfill a unique task or wants to pursue something they've never done. Therefore, the BullNet network also worked to expand their network connections to members of other social networks that had substantial differences including purpose (real estate development), type of business (non profits and for-profits), and relationship with other influential players (connections to city leaders).

Amplifying informational differences

This research found that information differences were a complex and paradoxical concept. Members tended to connect on similarities especially during the timeframe in which they were studied (start-up). However, as the network expanded and created greater diversity of knowledge and resources there emerged a greater need for supportive environment and inclusions that allowed for sensitivity in discussing the issues of race, socio-economic problems, inclusion/exclusion, etc.

One aspect of my theory going into this research was that a certain degree of informational differences were needed in order for novelty to occur. However, I found that this social entrepreneurship network, while attracting different perspectives, types of business types, personal interests, genders, specialties, geographic foci, knowledge, skills, and resources (as is discussed throughout this research), did not focus on differences. I believe there was a common worldview that held the group together. As the saying goes, "birds of feather flock together". I believe they connected on their similarities (homophily) and are learning from and about their differences which is sustaining the need to continue to be together.

One member argued, "we have so many members that see that business can be a force for social change, that is not something that is debated here. Everyone believes it" (Interview 8). This view is common across the network - the values that reinforce the mission are common throughout the social entrepreneurship network. Only then can the differences be explored. The contexts described before and the mechanisms that come next describe the nature of how informational differences are used through feedback, to encourage network weaving, and to work through tensions in the community.

A tertius iungens strategic orientation is a mechanism that enables collective interactions

The mechanisms to increase the level of interaction among these diverse actors included a tertius iungens strategic orientation. In addition to these deep knowledge structuring mechanisms, it was found that the sustainability of these interactions was dependent on a "tertius iungens strategic orientation" found across most of the actors in the system. The tertius iungens is a general disposition that helps facilitate new coordination between connected individuals. This set of values and norms was found to be central to the recombinative activity at the root of the social entrepreneurship system.

It was found that participants tended to forge connections, identify common strategic work interests, make introductions, and find opportunities for collaboration. However, they did not need to find common ground and appeal to a diverse set of interests. From the perspective of a social entrepreneurship network the general disposition is to forge connections between like-minded people who can benefit from becoming acquainted. The benefits can include strategic business connections or personal connections (Interview 7). Participants "try to connect something to a specific interest of a person, instead of a broader set of interests" (Interview 22).

The very nature of the social entrepreneurship network was designed to facilitate the connections between social entrepreneurs and the surrounding ecosystem of supporting organizations, people, and resources. As suggested, Obstfelds' (2005) concept of a "tertius iungens orientation" which is "a strategic, behavioral orientation toward connecting people by either introducing disconnected individuals or facilitating new coordination between connected individuals" (2005, p. 102). This kind of

[re]combinative activity is necessary for social entrepreneurship network to enact social change.

This concept of "tertius iungens" relates to the resource recombination found in complexity and structuration literature (Morrison, 2005). This orientation is a mechanism of social innovation in that the innovation itself is often in the recombination of ideas and knowledge with actors that would not necessarily have that opportunity. It was found that even the paying members perceived that their role was to connect other entrepreneurs to each other. This became a norm or source of legitimation through which other members (and this researcher) would take-up as they learned the norms and routines for this behavior.

Action-oriented mechanisms that support network weaving are necessary for social entrepreneurship networks

A social entrepreneurship network, through action-oriented mechanisms of network weaving (i.e. introducing disconnected others) and knowledge/resource recombination (i.e. knowledge café events), enabled opportunities for the actors to examine the conflicts between their personal schemas (of mostly early-stage start-up entrepreneurs) and the shared schemata within the collective. Mechanisms associated with safe space, social capital (peer-support networks), resource sharing (financial and skills), and knowledge dissemination (learning opportunities) were necessary for the network to hold together. This research found that through the context and conditions, actors found accessible reasons through which to organize. However, intentional network weaving on behalf of the staff and members of the network created opportunities

for the recombination of knowledge and resources across their individual ventures and to the larger eco-system described in this research.

As a result of BullNet founders and working group members mapping the resource flows into and within the ecosystem, revealing constraints, bottlenecks, and underused sources, they were able to find alternative resource strategies for the organization, thus creating a new organizational form, a social entrepreneurship network. For example, they chose not to become a funding entity for social entrepreneurs because these mechanisms already existed in the community through other outside resource providers including banks, developers and venture capital investors. BullNet identified operating partnerships with complementary organizations that promise to enhance the social entrepreneurs' impact by increasing the coordination of otherwise independent players.

The processes were associated with creating opportunities for members, staff, and the local community to convene (through workshops, lunches, meetings, co-working space, etc). This created a set of inter-cohesion networks. These inter-cohesion networks crossed between academia, government, local developers, service providers, and resource providers. These boundary-spanning networks created opportunities for collaboration and dynamic network creation.

These actions which came in the form of actively introducing people to other people with the resources, knowledge, and support they needed created reciprocal trust between diverse actors with different worldviews and personal efficacies to come together to produce alternative solutions. This network became a hub for double and triple-bottom line businesses to convene through co-working space, a peer-support

network, regular events and programming, and a place to make connections with others. It is physically located at the main cross-roads of the city which has enabled "random collisions" of people who are coalescing around the new attractor. These weak ties between diverse actors allowed for new information to enter the system. There were strong bonds inside the system that held the network tightly together like a hub.

This resulted in a hub and spoke network effect where many diverse actors were enabled through the hub in the middle. However, the light touch of the staff and members allowed for new members to join and be welcomed into the fold. Therefore, it was found that weak ties (i.e. new members/actors) are necessary for new information to enter the system. Strong bonds (i.e. friendship) were necessary for the social entrepreneurs to take collective action through joint projects, sharing information, or challenging assumptions.

The fine-grained interactions were changed to promote more exploration. These interactions were modified by (i) intentionally creating a collective around "innovation for the greater good", (ii) creating a safe-space to learn and explore, (iii) encouraging a tertius iungens strategic orientation, and (iv) active network weaving. Through the change in the human interaction dynamics of the fine-grained structures new course-grained structures emerged.

Conclusion 2: Course-grained structures are ratcheted as a result of fine-grained interactions

Course-grained structures are ratcheted as a result of fine-grained interactions through the conditions and mechanisms that enable knowledgeable actors to change course-grained structures over time

Fine-grain interactions and coarse-grain properties simultaneously impact one another by facilitating fine-grain interactions that gather and use information for the system (Gell-Mann, 2002). It was found that the agents, the social entrepreneurs, acting within this system had a deep understanding of the information for the system (i.e. context, conditions, and mechanisms) needed to create social change. Bloom and Dees (2008) further suggest that "social entrepreneurs not only must understand the broad environment in which they work, but also must shape those environments to support their goals, when feasible" (Bloom & Dees, 2008).

This research identified the practices that social entrepreneurs can use to create systemic ecosystem change at the course-grained level. Hazy and Uhl-Bien (2013) describe this process as a "ratchet mechanism." They argue:

This ratcheting process is intended to hold the coarse-grained properties that are observed (or in some cases just believed or expected) in order to enhance performance. Coarse-grain properties both *influence* and *are influenced* by individual fine-grain interactions. When the old way is lost, the change is irreversible, and the fitness (or performance) gains won within the ecosystem are preserved; the system has ratcheted its structure to hold its gains. (p. 8)

By doing this, the organization "holds on" to those organizing structures that have demonstrated improved performance (Hazy, 2012), and abandons the old way eventually institutionalizing a new structure. The ratchet mechanism prevents "backsliding into the old ways as the system" because of the new way has proven better (or more contextually appropriate). Hazy and Uhl-Bien (2013b) suggest, "human organizations work to 'hold the gains' in coarse-grain properties to enable step-by-step

improvements in performance even as the environment is changing" (p. 20). Holding the gain is a process whereby the contextual knowledge of the agents is used.

Contextual knowledge about the course-grained ecosystem are pre-conditions for making changes. Therefore, the process of mapping the ecosystem as a continuous and ongoing process is critical for creating potential for change at the next iteration.

Members of this network created and would actively study the map of the network players within the community. The relative importance the players in the ecosystem varied depending on the change the social entrepreneurs intend to create, the dynamics of the particular social issues, and where the network is situated in the ecosystem. BullNet, as a hub of social entrepreneurs, was often positioned in the middle providing the role of convener, connector, and facilitator among the many diverse players in the system.

Collective structures emerged through the interaction of knowledgeable actors in the system

Through this research, it was uncovered that the contexts, conditions and mechanisms associated with social entrepreneurship networks are similar to those found in a complex adaptive system (CAS). This research found the emergence of a network of entrepreneurs over time, which created new social patterns (i.e. interactions among social entrepreneurs and their related institutional connections). These patterns co-evolved to enable a new organizational form, a social entrepreneurship network. This new and dynamic form of organizing (novel to the city under investigation) was the result of powerful, ongoing actions and interactions of the social entrepreneurs. These interactions created opportunities for new knowledge and social structures to form inside the community and be sustained over time. The community morphed over time as the

interactions created a greater knowledgeability of the tensions that they found themselves embedded. Goldstein et al., (2010) call this process *interaction resonance*. These knowledge integrating and synthesis practices are used to recognize patterns as a means to identify signals that are relevant to the coarse-grain properties that currently operate or that are emerging within the system (Hazy & Uhl-Bien, 2013b, p. 7).

This greater knowledgeability of the context and conditions created a more robust, interweaved network of diverse actors through which a collective identity was created, the BullNet Network of social entrepreneurs. This network allowed opportunities to understand the norms, meaning, and power structures necessary to create a more coordinated and collective action process. Collective structures emerged and could be seen through the social and action-oriented mechanisms that formed through new rules (i.e. membership formal and informal norms and bi-laws), structures (i.e. community-based enterprises), and identities (i.e. "innovate for the greater good").

Through this process of creating more meaningful interactions between social entrepreneurs and collectives, a deeper understanding of the social entrepreneurship network's "theory of change" evolves. This helps put into context the environmental conditions and the relationships on which the organization depends becomes more visible. This results in the possibility of leading to a revision of that theory which will necessitate new organizing forms.

Identity is created through the stories of knowledgeable agents

The context (i.e. accessible reasoning for convening) mattered to the participants in this study. It can be understood through their internal collective stories that were shared in this study. The schemata within the context created the rules/heuristics for

sensemaking (i.e. "our town has a history of community organizing") and produced the conditions for specific action-oriented structuring mechanisms (i.e. a recombinatory community-based network). Specific stories, including the stories of Black Wall Street, an "organizing town", and "the rebuilding of the city" contain sources of tension that create the energy for organizing.

McKelvey (2004) sees tensions manifested in language as a process of selforganizing of the social system. The language processes are similar to Weick's (1995) discussion of sensemaking and Bourdieu's (1977) discussion of habitaus both stemming from Berger and Luckman's (Berger & Luckmann, 1966) social construction of reality. The conjuncturally specific knowledge (Stones, 2005) creates a co-evolving and continuous structuring of the collective.

In this case, the knowledgeable actors, including the social entrepreneurs, the city leadership, local developers, and the academic administration and scholars, came to the assumption that this city, which was ready for a renaissance and social innovation, would be the attractor to which they would focus their energy. This replaced previous stories around the city being a "tobacco town" or "textiles town." This understanding of knowledgeable actors enabled through their changed fine-grained interactions allowed them to ratchet the organizational forms of BullNet in order to take action as a collective network.

Networks co-create social norms and interpretive schemas which, in turn, change the "context"; feedback loops encode this new knowledge back into the larger system

The action-oriented mechanisms found in this study were dimensions of feedback.

They included a co-working space that enables conversations, feedback sessions,

meetings, and knowledge sharing. This created opportunities for interaction and network weaving and a resulting recombination of knowledge and resources across boundaries. The emergence of BullNet required agents to both challenge assumptions/bring in new ideas (i.e. deviation amplifying) or create a reinforcing collective identity (i.e. deviation dampening). Attractors in this study were the stable conditions that governed the human dynamics of the system. For example, the space, the location, the rules of behavior, and the events they held were all stabilizing conditions that enabled people to organize as a collective around "innovation for the greater good".

At the same time, deviation amplification (Maruyama, 1963) enabled the emergence of novel network structures through the ongoing interactions of new members and new ideas to change the system. As Buckley (1968) suggests, "there is no law of social inertia operating here...we cannot count on automatic reequilibrating forces counteracting system "disturbances" or "deviance, for, whereas we do find deviance-reducing *negative* feedback loops in operation, we also find deviance maintaining and deviance amplifying positive feedback processes often referred to as the vicious circle or spiral, or "escalation" (p. 110x).

As Kierkegaard has stated: "Life can only be described backwards, but it must be lived forwards". The actors in this system not only understood the history and the broad context in which they were operating, but also their need to be active change agents within the system. As a result, the social entrepreneurship network is an amalgamation of the course-grained structures that influence individual action and the fine-grained interactions that produce agency to change the system. The social entrepreneurship network is therefore a safe place to have the conversations, dialogue, and discussion

(fine-grained interactions) necessary to both make sense of the environment and in order to take more informed next action intended to change the system itself (course-grained structures).

Conclusion 3: Dynamical tensions create opportunities for hyper-emergence

Dynamical tensions that were found in this study were a necessary, but not sufficient condition for the emergence of a network of social entrepreneurs. However, with the existence of the course-grained structures and fine-grained interactions, social tensions created opportunity for hyper-emergent innovation for the greater good. This hyper-emergence was a result of mechanisms of intentional social network stimulation coupled with a context of creating a shared set of norms, working through power dynamics, and meaning-making within the network.

Tensions are necessary, but not sufficient condition for the emergence of a network of social entrepreneurs

As was originally espoused in the conceptual framework in Chapter 1 of this research, social tensions represent the "go" and "energy" for change within the system (Buckley, 1968; Schwandt et al., 2009; Wasden, 2010). It is a process that works through the tensions and contradictions associated with making an improvement to society, while making profits to sustain that improvement. It was found in Chapter 4 that understanding social entrepreneurship networks requires making sense of the tensions that social entrepreneurs face in pursuing social change activities. These tensions included:

• What is the role of the Social Entrepreneur? To understand the meaning of the role of the social entrepreneur, tensions emerged around was it focused on the self or the collective; did they have a global or local outcome orientation; do they focus on

doing well as a business owner or "doing good" as a social outcome? In addition, power dynamics amplified the tension of who is responsible –the government and institutions or the entrepreneur themselves. The role of the social entrepreneur was found inside the paradox of exploring new ways of social service delivery, while simultaneously exploiting what already works.

- What are their values and ideology? They grappled with the tension between creating business value versus creating social value. Should they be for-profit or non-profit, private or public, focus on financial value or social value, and where should they spend their efforts —on the lowest income members of society or for everyone? In addition, they fought a tension between whether to scale their innovations over time or extract the value in the short-term, which led to discussions of political left vs political right leanings. The values and ideology in this research found a paradox of acting in a socially responsible way, while simultaneously exploiting finite resources.
- What is the function of the network? They struggled with understanding the function of the network. Was it to scale what currently worked or create new novel solutions for members? Were they to --get stuff done or create a sense of community; --focus on getting new members or support existing members.? As it related to power of the network itself, they questioned was their function to create policy or enable action; --create organizational inertia or support unbridled innovation? Lastly, they struggled with the values of the network —exclusivity versus inclusivity. Were they an accelerator of a few good ideas or an incubator of many good ideas? Should they replicate what works across the state or focus on a specific community? As it related to

the function of the network, they struggled with the paradox of maintaining control, while increasing flexibility.

These fundamental conflicts created an opportunity for organizing, an *opportunity tension* (Hazy et al., 2010). Opportunity tension is created through the collective interactions of the members of the social entrepreneurship network. Tension puts pressure on individuals to change current organizing structures to take advantage of (exploit) a gap or need in society. These dynamical tensions were associated with the creation of new internal structures that emerged from the creation of new external structures and new practices that change the way agents viewed the world (Wasden, 2010).

These conflicts in the informational differences found within members of the social entrepreneurship network created both deviation-amplifying and deviation-dampening processes. Greater differences in the knowledgeability of the actors, as was shared above, created an awareness of more opportunity tension and the need for social change.

However, it was found that tensions require context. The requisite context which was one of the focuses of this study and which can be described by the constraints (or conditions) faced by social innovators. The social dynamics of tensions are relevant to the specific context. The context that was found in this study related to the history of a depressed community, which over the course of two decades struggled with its identity. The course-grained social structures, which were a main finding of this research, elaborate on the context of a social entrepreneurship network. The context included a coworking space, which signified their existence. The context included an ecosystem of supporting organizations (government agencies, financial institutions, educational

facilities, and small businesses) that enabled decision-making. Lastly, the context included the network of social entrepreneurs themselves that legitimized as set of norms through which they could generate collective action. These contextual factors created the conditions through which the social and dynamical tensions could be harnessed in order to enable collective value from the interactions of the diverse players in the system. Social tensions create opportunity for hyper-emergent innovation for the greater good

Tensions emerging from dynamics of meaning, power, and norms created opportunities for new organizing forms discussed above. BullNet created a *hyper-emergence*. This hyper-emergence was a result of deviation-amplification of the social needs found in the community. They did this by creating a network whose sole mission was "innovation for the greater good".

Competing tensions (i.e. economic gains versus social value) created the opportunity tension. This tension allowed the agents in the social entrepreneurship network (including the government officials, university program managers, social entrepreneurs, economic developers, and local community leaders) to organize. Their "lack of knowledge" about how to scale social value triggered a set of enhanced finegrained interactions, which led to the enactment of the social entrepreneurship network (SEN).

As previously discussed, a multitude of tensions were uncovered from the participants stories in this research. One fundamental tension was how to create the minimum critical environmental conditions required for the social entrepreneurship network's operating model to be a success and using that information to guide the social entrepreneurs' efforts to take the model into new areas. This tension was discussed as

"incubating or accelerating." For example, the accelerator model suggests, "If we pick the innovators, nourish and reward them, then we can have the greatest impact" (Interview 22). This was juxtaposed with statements like "Well-facilitated, diverse, dataendowed cohorts (of practitioners, policy makers, donors, etc.) can learn and improve" (Interview 22), an incubator model. These types of tension impact the size of the organization, the energy they spend on various activities, and the business model they pursue, which were all continuously debated among the participants. As a result, BullNet emerged quickly within a year as the place to debate these tensions.

The tensions around the problems were associated with deep structures (Buckley,1968) related to the modalities of signification (meaning) associated with control and freedom (existing business vs. start-up), power dominance associated with resource allocation (accelerator versus incubator), legitimation (norms) associated with (making many connections versus making deep connections). The people in the network convene and create a shared or collective identity through which they legitimize, signify, and create power dominance to support their own practices. This framework helped describe the continuous emergence and self-generation of patterns of collective identity that were found in this research.

Stones' strong structuration (external structures, internal structures, active agency, and outcomes) provided the parameters through which this study examined the emergence of new organizing forms. For example, the collective stories for the social entrepreneurship network acted as an attractor for values and norms of the organization. An attractor attracts behavior, such as people, events, rituals and communities. As discussed earlier, these strong structuration's internal structures explained how the

attractor, of "profit making in a tobacco industry town", was overtaken by an emergent attractor, "innovate for the greater good.." This replaced previous stories, which enabled people to organize around a new identity. This is confirmatory of the theory presented by Goldstein, et al., (2010), who argue "the process of social entrepreneurship can be thought of as a 'wave of change' within social networks that sweeps through the community from left (the old way) to right (a new way) as differences in perspective are recognized, appreciated, explored and synthesized into a social innovation that organizes human activity in a new way" (p. 7). The social entrepreneurship network that emerged co-evolved as interactions between the stakeholders in the community created a greater sense of the tensions around which they organized BullNet.

The emergence of co-evolving and self-organizing social structures created systemic patterns of connections among agents (i.e. co-working space, workshops, meetings) in BullNet. This dissertation research sheds new light on how the micro-interactions between agents in the complex adaptive system, BullNet, created a novel organizational form over time. This new understanding helps us theorize how specific contexts/conditions and sensemaking and action-oriented mechanisms in a social entrepreneurship network emerged from the patterns of interactions of the entrepreneurs in the system. As we stated earlier, Granovetter (1985a) argued that an organization tends to be embedded in multiple, complex social relationships with other organizations throughout its environment. This research confirms that the context of the social relationship (i.e. members' tertius iungens orientation) can be described and mapped and therefore create more knowledgeability in the system through which the entrepreneurs can generate potential next interactions. The social entrepreneurship network is a

synthesis of many social entrepreneurs knowledge about their meaning, values, and identity.

Recommendations for Theory

At the end of this study, the field of social entrepreneurship research appears as an intricate network, where researchers and institutions are involved in a social and collective game of strategic struggles and alliances (Dery & Toulouse, 1996). The concepts from structuration and complex adaptive systems are highly intertwined and provide unique insights into the concepts studied.

Strong Structuration

Stones' strong structuration theory has implications for understanding how (and at what speed) new social innovations are created. It was a supportive explanatory framework that enabled a better understanding of the interactive balance that is struck between environmental structures that shape our knowledgeability of how we will act and individual agency that creates those structures. Using the theory of strong structuration (Stones, 2005), this research was better able to examine the micro-processes that encompass the individual, the collective, and the environment. For example, in this study, Stones' (2005) strong structuration was used to identify the action and institutional realms and how they were transformed over time.

Stones' (2005) strong structuration explains how agents use internal, external and virtual structures to modify practices and lead to novel ways to eliminate social tensions. Complexity theory and the Law of Requisite Variety indicate that as system experiences significant changes in outcome that lead to decline and instability, radical changes in structures and practice are necessary to deliver the innovations required for survival

(Ashby, 1956; Axelrod & Cohen, 2001). Macro institutional structures and practices, as well as meso organizational structures and practices, create internal structures (schemas) and practices (scripts) that guide individual sensemaking and action (Stones, 2005; Weick, 1995). This research has examined how the actions, that are working through the tensions related to the duality of social structuring, "reproduce or modify institutions over time" (Barley & Tolbert, 1997; Jarzabkowski, 2008)".

Examining personal efficacies, signification and legitimation supported collective action for social change by enabling a collective identity and providing opportunities for sensemaking among the agents. This process created an opportunity to recombine knowledge and resources, and ultimately, develop new partnerships (i.e. structures) to change the environment.

The conditions were associated with tensions that created the cognitive structures that enabled a theory of change. In the case study, the actors in a city with knowledgeability of the struggles of its past created an ecosystem of supporting affiliated organizations, structures, and policies that attracted entrepreneurs focused on double-bottom line businesses.

For social entrepreneurs, the modalities of structuration effect how they see the problem as a collective and what action they will take to create social change. Moreover, a tension came in the form of competing values, which were manifest in interpretive schemas (structures of signification), normative expectations (structures of legitimation) and capacity to mobilize authority and resources (structures of domination) (Giddens, 1984; Greenhalgh & Stones, 2010). The network of social entrepreneurs negotiated the tension by creating a common language and set of practices, which were learned and used

by the network. In addition, this network regulated the tension between power relationships (domination) such that network members decided how resources will be recombined. Lastly, the network navigated the tensions by encoding rules of moral and ethical behaviors (legitimation) that govern their action. Through this process of working through tensions, a network of social entrepreneurs co-constructed a shared sense of the social value.

Complex adaptive systems

The tension found in these modalities can be examined as attractors competing with one another in a complex adaptive system. Tension provided the energy necessary to sustain the system and create emergent network structures around a shared sense of social value. Schemata were created and were reflections of the attractors, which moved the system toward varying forms of emergent network structures. The lens of complex adaptive systems theory was useful in examining the nonlinear and multilevel nature of the coexistence of the two strategies. Complex adaptive systems theory (Anderson, 1999) informed the analysis by focusing the inquiry on the actions and interactions of agents within the collective.

This research using a CAS lens created a new kind of case study done with theoretical alertness to micro-meso level factors that structuration and complexity theories inform. It provides a basis to begin refining and testing propositions and models about social change. Since CAS theory —assumes emergent phenomena from interacting independent agents, the concept of emergence addressed the issue of nonlinearity in that it took into consideration the agent's capacity for free choice, reflection, and the coevolution of agents and their *schemata* (cognitive and emotional guidance for agents and

the collective in their social interactions (Schwandt, 2008, p. 6). Because complex systems produce and use information and signals from both their internal and external environments, this research was able to systematically parse the agents' knowledgeability (or lack of knowledge) in order to understand their behavior which resulted in the creation of a novel social entrepreneurship network. The Executive Director recognized the complexity of the system and articulated the need for requisite variety, saying:

My expectations were relatively fluid. I came in hoping we would be able to make some difference, and I shouldn't have been surprised by this, but you come to appreciate the complexity of the challenges you are trying to take on are significant and difficult and require dedicated attention (Interview 22)

The nature of the problem required novel approaches that were informed isomoprhically at the collective and individual level of analysis. One member said, "I think that's both me and [BullNet] in that we always try to appeal to a broad audience (Interview 23). The nature of seeing yourself as the collective requires complex systems thinking. However, this was common as often the descriptions of the relationship with others and with the network was isomorphic in how they described their relationship with the city.

Complexity theory helped understand that small actions by individuals at critical times can dramatically affect population-level outcomes, and it shifted the emphasis of the analysis from central tendencies to idiosyncratic exemplars (Stevenson & Jarillo, 1990).

Structuration theory and strong structuration theory support our understanding of complex adaptive systems

Structuration and Strong Structuration

Structuration and strong structuration allow us to describe the nature of structural duality, the interactions, and the human dispositions. Structural duality in this study is mostly described through the process of a network emerging by describing the course-grained structures (with an emphasis on meaning) and the fine-grained interactions of agents in the system (with an emphasis on their dispositions and knowledge). Using Jarzabkowski's sequential structuration approach this is studied as a process over time (with an emphasis on the Time 3, the entry point this research engaged with the site).

Using the language of the structural duality in structuration theories helped to describe the nature of how people interact to create the social structures necessary for a social entrepreneurship network to emerge and sustain itself over a period of time. This process could be described as a mutual reciprocation between course-grained and fine-grained interactions. These are articulated in the schemata defined in the narratives that allowed us a glimpse into how the participants created meaning as it relates to being involved in a social entrepreneurship network.

Complex Adaptive Systems

Similarly, complex adaptive systems theories provide an explanatory language that helped, in this study, to interpret the results. Complex adaptive systems language was necessary in this study because there is no single solution to the problem of scaling social change through a network. Even if a solution were known, "no one individual or

organization is in a position to compel all the players involved to adopt it" (Kania & Kramer, 2013, p. 2).

The language of emergence, non-linearity, co-evolution, and structural attractors allowed this researcher to describe the same process of duality of structures and meaning making, but in a way to appreciate the emergent nature of the phenomenon of social entrepreneurship. As described by Doolley and Van de Ven (1999), the social system co-evolves through emergent social phenomenon that allow it to regenerate and self-organize knowledge schemas and social structures of next interactions.

Nonlinearity in this study refers to the problem of organizing for collective impact (Kania & Kramer, 2011) at multiple levels of analysis concerning complex and nonlinear human actions. Emergence and self-generation, means that over time new structures form, like the SEN in this study, in order to sustain the meaning, power dynamics, and norms necessary for people to continue to work toward a collective value.

Co-evolution means that the actors in this study are continuously interacting with each other and the environment and therefore are creating the rules of the game and following the rules of the game at the same time. The language of complexity is entirely congruent here with the structuration language of the duality of structures.

Structural attractors in this study refer to the stable conditions that governed the human dynamics of the system. For example, the space, the location, the rules of behavior, and the events they held were all stabilizing conditions that enabled people to organize as a collective around "innovation for the greater good".

Both structuration and complexity theories use s*chemata*, or schema, They are comprised of sets of simple "rules" for sensemaking and are indicative of a "...cognitive

structure that determines what action the agent takes at time t, given its perception of the environment at t-1" (Anderson, 1999: 219). However, their treatment of how actors interact is different. In complex systems, agents act in ways that are consistent with the rules of the game. In structuration theory, those agents are knowledge players in the system and thus may act contrary to these simple rules in many cases. As such, this study used the schemata from the perspective of strong structuration theory to examine the agents' knowledgeability and habitas as factors in how they interact with each other and the environment that they are enacting. Structuration theory was necessary add to complexity language because complex adaptive system social systems theory does not focus on the agents' knowledgeability which is a critical component in understanding the nature of how a social system evolves.

Furthermore, structuration theory emphasizes the inclusion of context as a critical component in understanding how uncertainty is "worked through" (not resolved). This is the reason for and necessity for case studies to include both elements of complexity and structuration. Structuration theory was useful in defining the dimensions of the course-grained structures in a social system --specifically, the signification, domination, and legitimation of the social structure that emerged over time. Strong structuration, in particular, provides a framework for examining the fine-grained interactions and their relationship to the course-grained structures.

This paper offered an expanded theoretical explanation of the evolution of a social entrepreneurship network that highlights how a new one emerged rather than how an existing one persisted. This research aspired to move organization science to continue to employ com- plexity models (Prigogine & Stengers, 1984) whose evolutionary

epistemology focuses on dissipative structures driving social systems toward increasing diversity while maintaining a state of perpetual disequilibrium.

This dissertation research found that conditions and dynamic mechanisms of emergent self-organizing for social innovation. It was found that:

- Tensions are necessary, but not sufficient condition for the emergence of a network of social entrepreneurs
- Social tensions create opportunity for hyper-emergent innovation for the greater good
- Networks provide the social mechanisms needed to lower the probability of failure and increase the level of fine-grained interactions in order to extract value
- These conditions, mechanisms, and interactions enable knowledgeable actors to change course-grained structures over time

Attending to these dynamics that underlie emergence of social innovation helps fill an important gap in the literature on organizational science of social entrepreneurship networks. We now understand the (i) multiple and continuous interactions among social entrepreneurs and the surrounding ecosystem; (ii) autocatalytic feedback loops that amplify diversity and reinforce tensions in the system; (iii) social and action-oriented mechanisms that stabilize the emergent order; and (iv) recombinations of pre-existing resources renew the social order, add variety, and fuel the feedback processes.

Dynamic structuring practices

From the perspective taken in this research study, social entrepreneurial organizations can better understand the conditions—external (political, economic) and internal (social, technical)— that have been set or are being set to enable social entrepreneurial actions and outcomes. Furthermore, it addressed how filling "structural holes," through a combining strategy (i.e., recombinations of ideas and people) in social

entrepreneurial networks, enabled and sustained the network. Using a strategy focused on combining (and recombining) people attracted around social innovation, the new organizing network emerged in an unpredictable way to solve social challenges. Because context matters, it is critical that social entrepreneurship networks are attentive to the conditions that have been co-constructed with the external environment (like the city and local developers) and create parameters for the action-oriented mechanisms that support value creation. These action-oriented mechanisms in turn create new conditions for action.

Novelty generation through Structural Holes in Networks

In this research, it was found at the start, that there was no social entrepreneurship incubator. There was no accelerator. There wasn't a co-working space. There wasn't an anchoring organization. There was a network, however. A network is a set of interconnected nodes structurally aligned to communicate in certain ways. Self-organizing systems are complex networks of entities that synergetically interact and produce novelty (Chiles, Meyer, & Hench, 2004).

While networks do not act, they provide the contexts for which action can occur (Burt, 2004, p. 354). This research described this context through which action occurred in a social entrepreneurship network. The network allowed for "the distribution or control of resources such as knowledge, activists, money, decision power, infrastructure, technologies, and cultural definition power" (Fuchs, 2006, p. 131). This distribution created opportunities for BullNet, a novel organizational form to emerge over time.

This result has significant implications for social network theory. The theory of structural holes proposed by Burt (1995) suggests that brokerage provides social capital.

Social capital is created when people have an advantage because of where they sit in the network. As a result, "between-group brokers are more likely to express ideas, less likely to have ideas dismissed, and more likely to have ideas evaluated as valuable" (2004, p. 349). Networks with structural holes are common as it relates to organizing for social innovation. The action problem presented by structural holes is inherent in social changes because people are dispersed, come from different areas of practice, and are often not well connected. As a result people have difference interests, perspectives, and languages needed to effectively act together as a collective.

By examining the nature of the network interactions and describing how people in the network fill structural holes, this research furthers our theory of structural holes by examining them in the context of our understanding of social entrepreneurship networks. When social innovation is a priority, we know as a result of this analysis that, a tertius iungens orientation helps to fill these structural holes in a way that helps to combine knowledge and resources that would usually not be connected. This orientation is overlooked by Burt and colleagues who emphasize a tertius gaudens orientation to fill structural holes by exploiting two disconnected parties for their own benefit.

The implications this research has for future theory is that a tertius iungens strategy (Obstfeld, 2005) to fill structural holes can be examined as an alternative way to closes the gap between disconnected others by bringing them together in a way that supports their coordination with out adversarial tension and competing claims. This orientation to filling structural holes could have significant implications for how we understand the behaviors and motivations and habits of individuals filling structural holes in social entrepreneurship networks.

Recommendations for Practice

Collective Impact

Kania & Kramer (2011) suggest that collective impact is "the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem" (p. 36). While collaboratives and networks dedicated to social change are not new concepts as seen in public-private partnerships, communities of practice, and other joint ventures, this research found that social entrepreneurship networks have a distinct difference. The conditions and mechanisms in a social entrepreneurship network enable collective impact. This study found that the coursegrained structures and fine-grained interactions are similar to the conditions for collective impact success. These include a common agenda, shared measurements systems, mutually reinforcing activities, continuous communication, and backbone support organizations. In the BullNet social entrepreneurship network there was a *common* agenda focused on "Innovation for the Greater Good". Shared measurement systems began to emerge to include B-Corporations to measure social impact. The network itself had *mutually reinforcing activities* that allowed them to coordinate efforts on joint projects instead of duplicating efforts. They were supported by *continuous* communication enabled by social events, meet-ups, networking events, and project collaboration meetings that were regular and reoccurring. Lastly, they were supported by a backbone support organization, BullNet, which had a dedicated staff to plan, support, facilitate, measure, and report their collective impact. Social entrepreneurship networks provide much of the context and mechanisms necessary to enable and sustain collective impact.

Scaling

This study supports the earlier work of Alvord, Brown, and Letts (2002) who stated that the "more we know about the forms of a social entrepreneurship, the more possible it may be to design successful future initiatives" (p. 272). One of the primary implications for practice is around scaling social innovation. When asking the founder of BullNet, how this would scale and replicate in another context, he said:

Well, we're about to find out. We're doing [another city] now. It's a very different dynamic, built on a very different vibe. It's not an old industrial town. It's a sleek, financial center that has gotten rocked because of the current economics. We'll see. I think it will have a different flavor to it. It's a bigger city so some of the convening work that we're doing here in is city>, there's already an organization that does that. We'll be partnering with them very closely. There are different dynamics. I think the fundamental tenant of building out an intentional community that is geared around social innovation and impact does have resonance in different types of communities. My only caveat to that is I think there is a certain density that you need in order to pull a model like this off. It is so community driven. There is a certain size city that I think you would have a hard time pulling it off. There wouldn't be enough density (Interview 22).

Therefore, to scale a social innovation like BullNet, the innovators have to be extremely cognizant of the context, create mechanisms that coordinate the players in that context, and weave a network that coordinates action on behalf of the network. In order to do this effectively, innovators must map the ecosystem similar to the work of Bloom

and Dees (2008). In addition, social innovators must reduce the temptations to oversimplify social change.

The one true thing that we seem to be able to say about business models in social entrepreneurship these days is that by necessity, they must continually adapt and change. Most people may think this is primarily true for direct product or service organizations, which face pressures to listen closely and adapt to customer demand, and thus make sure they are offering the product or service just as customers want and thus creating the benefit they intend. But the pressure to listen and adapt is also true for the vast and growing set of intermediaries with social purposes⁵.

Ultimately, social change in a city could use "the Hub" model of collaborative working space for social entrepreneurs combined with the "Y-Combinator" model of funding low-cost tech startups [provide promising startups small amounts of seed capital and intense mentorship and networking in anticipation of further investment]. In this model, which is geared toward social enterprise, the Y-Combinator style investment would be focused on startups that are building services useful for other businesses and social startups. In addition to an investment, the startups get to work in the Hub space. In return, they give up equity and also a small chunk of their developer time to pro-bono or reduced cost projects for the nonprofit social entrepreneurs who are part of the same Hub community. This combines the density, talent, and energy of the startup world with the mission focus of the social enterprise world. This model would require finding the right partners, co-creating the details with the community, and allowing for novelty and emergence of new models to form inside these few boundaries.

⁵ http://www.socialedge.org/blogs/case-on-business-models

Social innovators can develop different operating models for different ecosystems or a more robust operating model that works in a variety of different ecosystems. However, creating connections, enabling entrepreneurship, re-purposing spaces, fostering a local identity, and amplifying voices were all elements that created positive change in this case and enabled the network to co-evolve and change as the conditions changed. *Shorten the cycle of feedback loops*

Ultimately, nothing slows innovation more than evaluation. This research convinced this researcher that the most impoverished view of learning in action is through evaluation before experimentation. The idea that we have to generate absolute certainty about the intervention before we bring to scale, must be forgotten. Dynamic approaches that allow learning, experimentation, and novelty are necessary for a community to work through the tensions that brought them together. Shortening the cycle of feedback loops will create opportunity for immediate evaluation and changes to strategy and organizing. This can be supported by the feedback mechanisms described in this dissertation research.

Therefore, in the context of a social entrepreneurship network, we must enable members to act as network weavers. A Network Weaver (Krebs & Holley, 2006) is someone who is aware of the networks around them and explicitly works to make them healthier (more inclusive, bridging divides). Network Weavers do this by connecting people strategically where there is potential for mutual benefit, helping people identify their passions, and serving as a catalyst for self-organizing groups. Understanding the conditions and enabling mechanisms for a social entrepreneurship network that enhance this will serve a network looking to scale innovation.

Recommendations for Research

As Guba and Lincoln (1981) note, "[c]ase studies can oversimplify or exaggerate a situation, leading the reader to erroneous conclusions about the actual state of affairs" (p. 377). This study was designed to pull out an accurate description of the context, mechanisms, and human interaction dynamics associated with a social entrepreneurship network. The goal of this study was not to simplify and generalize the findings but to enhance the accuracy or our theory building around the topic. The use of narrative and temporal bracketing in this study supported our ability to achieve higher accuracy with the consequence of lower simplicity and generality. Future research may want to achieve higher simplicity and generalizability.

Future study of the human interaction dynamics (HID) among agents in a social entrepreneurship network could be enhanced through comparative case study, modeling of agents, and through social network analysis. These future methods could be accomplished through studies of the nonlinear nature of human interaction dynamics which would enhance our:

- (i) Understanding the initial conditions through inductive and abductive research approaches to develop a theory of social entrepreneurship networks (enhancing this study through more comparative approaches).
- (ii) Understanding the dynamical systems using multi-agent modeling to demonstrate the deductive logic needed to test these theories.
- (iii) Understanding of how networks impact the interactions among agents in terms of community building, recombination of knowledge and resources, and personal influence/power.
- (iv) Examining human strategic agency

Understand the Initial Conditions

Understanding initial conditions through inductive research approaches can help to develop a theory of social entrepreneurship networks. These initial conditions should be described in such a way that we can study the patterns among the networks of agents. These patterns can help us to see the interdependencies between the network of actors and begin recognizing their dynamics. Case study and complexity theory work well together when you focus on the initial conditions in order to understand emerging patterns and dynamism, with a particular attention on defining the systems properties (Anderson et al., 2005).

Therefore, future research could use inductive and qualitative approaches examine how agents make meaning of the tension found in the network connections. As previously discussed, Anderson, Crabtree, Steele, and McDaniel (2005) coupled complexity theory with case study methods. In their research, they define the attributes of studying an integrated system. The attributes include: understanding interdependences, being sensitive to dimensions of relationships, focusing on non-linearities, looking for the unexpected, examining unexpected events, focusing on processes as well as events, recognizing dynamics, describing patterns as well as events, seeing patterns across levels, understanding the patterns of change, shifting foreground and background, and redefining the observers roles, and learning the systems history (Anderson, et al., 2005).

Understanding Dynamical Systems: Multi-Agent-based Modeling

"The development of a well-specified and robust model describing the mechanisms of emergence in [human interaction dynamics] HID remains an ongoing

challenge for the field" (Hazy & Uhl-Bien, 2013b). Researchers (Lazer & Friedman, 2007; Tivnan, 2006) have used agent-based modeling to examine the network structures that affect the balance between exploration and exploitation. These techniques provide a vehicle for understanding the tensions of social structuring for the purposes of explorative and exploitive innovation. Future study could use computer simulation (Gottemoeller, 2010; Hazy, 2005; Panzar, 2009; Tivnan, 2006) to examine the complexity of the interactions among agents in a social entrepreneurship. Hazy (Hazy, 2008) describes this capability in the description of the models of system and environment in his discussion of generative leadership.

Hazy and Ashley (2011) use mathematical results from complexity science to describe a "dynamic process whereby patterns of human interactions are focused into persistent organizing forms which in turn influence how human interactions unfold" (Hazy, 2011, pp. 14). For example, the coarse-grained properties can be modeled. As was found in this study, course-grained properties that operate in the "social sphere" can be modeled as cultural norms, policies, or practices. They can also be described in the technological aspects like we found in this study as co-working space. These kinds of "regularities" arising through the emergence of coarse-grained properties allows predictable modeling to help us inform how social entrepreneurs behave and interact in the network.

Understanding Agent Interactions: Social Network Analyses

Since the primary challenge for social entrepreneurship networks is to scale their impact, social networks could support us in understanding how innovative ideas and social innovation practices proven to be successful can be scaled-up using the network.

This research could be understood from three distinct roles of network actors in a social entrepreneurship network: connectors, brokers, and sensors, popularized by Krackhardt (1990) in his concept of Kite Network. By understanding how these different types of actors interact, we can better understand the implications for scaling impact.

Connectors: These people have many incoming links and therefore often receive much information from other people. Generally they are the go-to people for advice and are therefore well suited to influence the adoption of new practices. Identifying the connectors that are most important in the network as a whole could support our understanding of the actors roles in a social entrepreneurship network.

Brokers: Brokers connect groups of people that would otherwise not be connected to each other. Brokers are very well suited to influence the design and initiation of scale-up solutions and to spread information and knowledge between segments of the network and hard to reach people. Using betweenness measures of centrality to identify brokers, we could assess who the people are who most often lie on paths between other people in social entrepreneurship network.

Sensors: Sensors have the shortest degrees of separation on average with others in the networks. Since their place in the network positions them as 'people in the know,' they are often well aware of new developments and supply them with accurate and relevant information about the impact of social innovations. They will help in sharing knowledge as well as to influence the feedback or real-time assessment of scale-up implementation. Understanding the brokers, sensors, and connectors could give us a more accurate representation of the role the actors play in building and sustaining social change within a social entrepreneruship network.

Scale-free networks and Power-Law Distributions

"The power laws that keep networks scale-free also make them vulnerable—knock out a hub and the network may be disabled" (Mitchell, 2009). If we view organizations through a scale-free network lens, we see that organizational research studies the regularities that govern the interdependencies among different nodes in a network, that is, the structure and the dynamics of their connectivity. Connectivity (ties) is a variable that reflects the level of adaptive tension in the network. Boisot and McKelvey (2010) maintain that "research must engage with the power-law distribution as a whole, without privileging one particular region at the expense of another" (p. 428). Therefore, a study that examined the nature of the long-tail in the network—those that are on the fringe of the network, but creating social value, would be very useful to enhancing our understanding of the human interaction dynamics.

Moore and Westly (2011) describe it like this:

Also important is the fact that although skilled individuals are needed in order to mobilize networks, networks are notoriously difficult for individuals to control. The skills of an entrepreneur are not those of the "heroic" leader. Rather they often work in obscurity to manage the emergence that they cannot actually control. They connect; span boundaries; mobilize resources of knowledge, power, and resources; recognize and generate patterns; revitalize energy; and keep alive a strategic focus. But they are, nonetheless, leaders—for all their relative invisibility. (p. 4)

The implications for how we understand leadership in a network of social entrepreneurs is critical and should be further studied in the scale-free context.

Examining human agency

This research dissertation helped to describe the difficulty in adequately articulating the strategic agency that must be present within the network in order for cross-scale interactions to occur. It specifically examined the skills needed from entrepreneurs, including ones that enable pattern generation, relationship building and brokering, knowledge and resource recombining, and network sustaining (2011). This study gave us clues to understand the actors and their dynamics, but greater clarity on roles and responsibilities of the participants would add to our understanding.

Further research examining how human agency actually works within networks could be very useful. For example, in Stones' theory of strong structuration, affect and emotion are essential components. Research needed to be conducted at the *micro level* to help explain how affective style and predispositions of attitude operate in the context of SEN as mechanisms of relationship-building, dynamic co-emergence, and natural selection processes in SEN's mutually reciprocal nature. When SEN-forming behaviors and actions are triggered by emotional engagement, the positive valence, force, and power of affectivity can provide the energy of product social formation (emergence), reformation, and/or transformation. Neuroscience and affective neuroscience (Panksepp, 1998) are illuminating how the complexity of interaction and inter-subjectivity actually occur, where solely single discipline explanations of social bonding and structural coupling (found in psychology and sociological interpretations) have fallen short in explaining the complexity of social interaction, intersubjectivey, and the tertiary bonding represented by Obstsfelds (2005) notion of tertius iungens.

Lastly, this research found that informational differences were a complex and paradoxical concept. Members tended to connect on similarities especially during the timeframe in which they were studied (start-up). However, as the network expanded and created greater diversity of knowledge and resources, there emerged a greater need for supportive environment and inclusions that allowed for sensitivity in discussing the issues of race, socio-economic problems, inclusion/exclusion, etc. Further research could examine the paradoxical nature of encouraging diversity while enabling collective solidarity. Regardless of these potential limitations, the findings proved to support a richer understanding of human interaction dynamics in a social entrepreneurship network.

Conclusion

A greenfield is a project which lacks any constraints imposed by work that has come before. A brownfield is a project, which builds on the infrastructure already there (bricolage). Most start-up entrepreneurs expect to live in a greenfield but almost universally find themselves in a brownfield. Therefore, it is incumbent upon the social entrepreneurs to become knowledgeable about the unique context in which they are acting. This knowledgeability will support in created enabling mechanisms that will work "in situ." Social entrepreneurship has raised increasing interest among scholars, yet we still know relatively little about the particular dynamics and processes involved. This paper contributes to the field of social entrepreneurship by illuminating the context and mechanisms that enable a network for social entrepreneurs to act collectively. Moreover, it identified the non-linear nature of how a social entrepreneurship network co-evolves with the environment over time. Those changes are found through the collective's effort to work through emergent tensions associated with the norms, power,

and meaning of why the network exists. This ongoing struggle creates knowledgeable actors who self-generate novel network structures in order to sustain (and scale) solutions to large-scale social problems.

Using the perspective of the dualities of social structures found in structuration theory, tension can be expected due to the coexistence of a variety of world views and meanings (signification), competing values (domination), and personal efficacies (legitimation) (Schwandt et al., 2009). Moreover, human agents' general dispositions and embodied knowledge ('habitus') help explain the "ontology-in-situ" of particular structures and agents in the system (Stones 2005). Tension emerging from both structures and practices provides opportunity for "both the creation of change capacity and conflict within social entrepreneurial systems" (Schwandt et al., 2009). Schemata are reflections of the conditions which structure the system toward varying forms of emergent network structures, and consequently affect the creation and scalability of social innovation.

This research examined the conditions and mechanisms necessary to sustain a social entrepreneurship network. The network changed structurally over the period preceding the study and continues to change after the study. However, fundamental to "working through" the tension that precipitate the change requires a network of people with diverse experiences working toward a collective value of "innovating for the greater good." The diverse network required a novel organizing form, that of a social entrepreneurship network. The role of social entrepreneurship network as was found from this study is to continually evolve and adapt with the conditions presented at that time.

This research found the emergence of a network of entrepreneurs over time, which created novel social patterns. These patterns co-evolved to enable a SEN. This new organizing form was studied through the requisite conditions and social mechanisms necessary to create and scale social value. The conditions included the constraints and influences imposed upon particular agents by course-grained social structures. The social mechanisms identified as fine-grained interactions included the sets of internal assumptions that specified how people would interact and connect with each other. These structures and interactions created a set of dynamical tensions that enabled the emergence and sustainment of the SEN.

It was concluded that fine-grained interactions are enabled through networks, which provide the social mechanisms needed to lower the probability of failure and increase the level interactions. In addition, course-grained structures are ratcheted—holding on to what works-- as a result of fine-grained interactions that enable knowledgeable actors to change the structures. Lastly, dynamical tensions create opportunities for hyperemergence –a form of kick-starting—a social entrepreneurship network.

The problem with scaling social innovation is that most social entrepreneurs are not connected, which creates a lack of resources, context, and mechanisms to support the human interactions dynamics needed to create social change. How we connect with each other (i.e., the networks we enact) affects the propensity and speed at which new structures are generated and sustained. This is especially true for social entrepreneurs who catalyze a network of people toward social change. Social entrepreneurship networks simulate collective impact, which holds the promise of sustainable social innovation.

Appendix A: Interview Guide and Protocol

There will be one interview with each participant of the approximately 30 subjects identified at a neutral location in <The City> to which both researcher and subject agree. The interviews will range from 60-90 minutes per session.

Methodology

This study will use semi-structured and open-ended interviews. There will be an introduction to describe the general interview process followed by the interview questions designed to elicit rich data about the participants experience in a social entrepreneurship network. The researcher will also ask each participant, to write or tell a story about an event related to the social entrepreneurship network and answer a set of questions about their strategic behavioral orientation. Lastly, the researcher will conclude the interview.

Participant Information

- Name of Organization:
- Name of Interviewee:
- Role of Interviewee within their organization:
- Relationship of Interviewee to the case study site:

Types of Probing Questions for Interviews:

- What is the purpose or vision for the social venture with which you are involved?
- What is your organization's measure of success?
- What do you understand BullNet's measure of success to be?
- Do you believe that these contribute to creating social value for the <The City>?
- Please share the story about *how* you became involved in this social entrepreneurship network.
 - o What was your role?
 - o Whom were you connected as a result?
 - What do you enjoy most about the network? How would the network have to change to be most effective?
- Are you dealing with tensions created by different ideas and knowledge?
 - o If so, please share a story about the *tensions* you were working through, overcoming, or living with in the process?
- To what degree are you supported through the sharing and combining of resources and knowledge though the network?
 - Please share a story about how you *combine* resources and knowledge.
- Final Question: Choose a metaphor to pick your experience in the network?

Conclusion

- Thank the participant for their valuable input.
- Explain the data-gathering timetable, data storage and elimination process.
- Explain the "member check" process.
- Conclude the interview.

Appendix B: Tertius Iungens Questionnaire

Please tell a short story about your experience participating, as a social entrepreneur, in the BullNet Community. Be specific and describe things that could include the situation and context of your involvement, the interactions you have had with others, what things you have done within the BullNet Community, and what outcome resulted. It can be good or bad, what matters is that you describe the events in your own language. After you have told the story you will be asked to indicate its meaning through a series of questions.

	You can return and tell as many stories as you want					
Give t	he Story a Title	!				

Please rate the following questions on a seven-point scale (from strongly agree to strongly disagree), as they relate to the story you told above.

- 1. I introduced people to each other who might have a common strategic work interest;
- 2. I try to described an issue in a way that appeals to a diverse set of interests;
- 3. I saw opportunities for collaboration between people;
- 4. I pointed out the common ground shared by people who have different perspectives on an issue;
- 5. I introduced two people when I think they might benefit from becoming acquainted; and
- 6. I forged connections between different people dealing with a particular issue.

Appendix C: Informed Consent Form

Introduction: You are invited to take part in a study being conducted by The George Washington University. You are being asked if you wish to take part in this study because you are playing strategic role in the start-up of socially driven venture and you are a member of 'BullNet'. The purpose of the interview is to better understand how social innovation can be enabled through social entrepreneurship networks.

I truly appreciate you taking time to speak with me about your experiences. Please read this form and ask any questions that will help you decide if you want to be in this study. Taking part is completely voluntary and even if you decide you want to, you can quit at any time. Your decision to take part will not affect services or benefits provided to you by 'BullNet'.

Interview Length: The proposed time for the interview is 60-90 minutes. The interview questions are semi-structured allowing freedom to share your experiences related to the network.

Audio Taping and Note-Taking: In order to maximize our time, my research preference is to audiotape our interview. This will allow me to focus on the content of what you are saying. Therefore, I will keep note taking to a minimum. I am the only researcher on this study and I will be using a software program called Atlas TI to analyze the data. I will listen to the audio, run the program, and map themes and patterns found that relate to the research questions. Upon completion of that exercise, I will review your transcript with you to check for validity. The audio files will be kept in my home office and the downloaded materials will be kept on a separate hard drive in the same home office. This office is locked and secured on a nightly basis.

Participant Protection: Due to the nature of the research question, it may not be possible to completely maintain the confidentiality of your organization. All attempts will be made to do that. Although your organization will not be named in any obvious fashion, it may be easy to decipher by the type of organization that you are identified as in the description. However, for your individual protection, each interviewee will be given a pseudonym. This will assure that you are never identified directly.

The George Washington University takes the interviewing process of human subjects quite seriously, and this document that I am requesting your signature on is our informed consent form. This is our oath of the researcher to assure that all of this information will be held confidential, that you participated as a volunteer in the process, and that at no time did I try to inflict harm in any fashion.

Documentation Consent: If you agree to take part in this study, please sign below. Typing your name and date indicates consent.

Subject signature:	
Date:	

After you sign this Consent form, the research team will provide you with a copy. Please keep it in case you want to read it or call someone about the study.

Appendix D: Documents

- 1. 1999 White Paper
- 2. Bloom and Dee's paper
- 3. Business School assessment report
- 4. BullNet Strategic Plan
- 5. Membership webpage for BullNet
- 6. Website for SEN
- 7. Chamber of Commerce web site
- 8. Chamber of Commerce Startup Initiative
- 9. Social Capital and BullNet
- 10. Local Entrepreneurs Video
- 11. BullNet Membership Form
- 12. BullNet Member Profiles

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