THE ROLE OF RELATIONSHIPS IN BUILDING CAPABILITIES FOR SOCIAL INNOVATION: THE CASE OF SOCIAL ENTERPRISES

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Abstract

Increasing societal problems in social welfare, governmental and state systems, and recent cuts in public spending, have raised interest in the role of social innovation as a means of providing potential solutions. Social innovation is defined as the innovative activities derived by organisations with a primary goal to address unmet social needs. The thesis examines how this distinct form of innovation can be fostered through a unique organisational form – the social enterprise. Adopting a dynamic capabilities perspective, the study investigates the role of external relationships in supporting social enterprises engaged in social innovation.

The thesis commences with a review of the literature and finds that, in contrast to extensive research into technological innovation, few empirical studies of social innovation exist, highlighting a need for research into the process of social innovation, how it is undertaken by organisations. Drawing on the literature review, a conceptual model is presented that illustrates the social innovation process in two stages: "Seizing and Selection" and "Scaling and Implementation", and depicts the external relationships engaged by social enterprises to harness the capabilities necessary for social innovation.

Using data from a large-scale survey with respondents from 262 UK social enterprises combined with 31 semi-structured interviews in a mixed method design, the study supports the conceptual model and finds that the process of social innovation occurs in two distinct stages. Further, the research identifies a diverse range of external organisations that are key to accessing the capabilities necessary for social innovation, and maps these external relationships to each stage of the innovation process. The study goes on to identify the barriers social enterprises face during the pursuit of social innovation. The thesis concludes with policy and managerial recommendations on fostering social innovation in social enterprises.

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1 Introduction

1.1 Introduction

The focus of the thesis is the management of the social innovation process, specifically, the role of relationships in building capabilities for social innovation. Studies of innovation have broadened in scope, moving on from looking at products, services and processes to include a wide range of aspects from technological, market, organisational, to environmental and now also social innovation. Social innovation is not a new concept and has been practiced for decades (Nicholls and Murdock, 2012). Nineteenth and twentieth century Britain gave rise to new models of childcare, housing, community development and social care, leading towards the development of health and schooling systems as well as innovative financial services such as credit unions. More recently, United Kingdom (UK) policy measures for community welfare and generation have resulted in the emergence of bottom-up approaches as endeavours are made towards supporting the concept of the 'Big Society' (Alcock, 2010). With increasing societal problems in social welfare, environmental and governmental or state systems, accelerated by 'global crises' (Nicholls and Murdock, 2012), there has been a rise in interest in the role of innovation in addressing social problems.

Social innovation, defined as the "innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly diffused through organisations whose primary purposes are social" (Mulgan, 2006: 146), is relatively underresearched in comparison to technological innovation. Whilst the process of technological innovation has been well researched, there are very few detailed empirical studies on the process of social innovation. The complexity of the multifaceted global social issues has been highlighted (Chalmers, 2013; Shaw and de Bruin, 2013) not only drive the processes and outcomes of social innovation but also increasingly causes the boundaries of conventional sectors to dissolve (Nichols and Murdock, 2012). In this light, social innovation is seen as an interactive process of collective learning across sectoral boundaries: it happens in all sectors, public, non-profit and private" (Murray *et al.*, 2010: 3), thus social innovations arise as a result of interactions between different actors operating towards the same social purpose and are developed through interactions (Neumeier, 2012) between a diverse range of actors.

Whilst much of the literature concerns itself with defining the phenomenon, there has been little theoretical and empirical contribution on the nature of social innovation and the capabilities involved in undertaking the social innovation process relative to its traditional counterpart (Chalmers and Balan-Vnuk, 2013). Technological innovation literature has advanced from an internal view of the process and stresses the importance of inter-firm learning and linkages for innovation. Although similar concepts such as 'cross-firm' capabilities and 'cross-fertilisation' of ideas and values between multi-stakeholders have been proposed, there still remains a significant area yet to be researched. The works of Chalmers (2013; Chalmers and Balan-Vnuk, 2013) stress the need to examine the nature of social innovation and highlight that there is a considerable gap in this knowledge, particularly with concern to the capabilities developed in pursuit of innovative activities (Chalmers and Balan-Vnuk, 2013). In order to address this gap in the knowledge of social innovation, this research adopts a dynamic capabilities approach with a focus on the role of relationships in harnessing capabilities during the social innovation process.

1.2 Research Aims and Objectives

Theoretically, the thesis aims to contribute towards an enhanced academic understanding of innovation, social innovation and the management of the firm. Following from the review of existing literature a conceptual framework is presented in which the researcher synthesises pertinent models of social innovation, innovation and dynamic capabilities into a conceptual model of the social innovation process.

Empirically, the research employs social enterprises as the unit of analysis. Social enterprises are entrepreneurial organisations that operate the 'double bottom line': first, for economic purposes, creating surplus revenue for economic sustainability in order to remain functional, and second, to create social value (Alter, 2007). The focus is on the relationships social enterprises develop during the pursuit of social innovation and the drivers for these relationships. By their very nature, social enterprises are often subject to a fluctuating supply of resources (Chalmers, 2013; Murray *et al.*, 2010; Mulgan, 2006). Consequently social enterprises must develop or adopt strategic solutions to improve existing internal resources and capabilities, and to acquire resources and capabilities that currently do not exist within the organisation.

In order to develop a sound investigation into social innovation and the management of the social innovation process, the thesis views social innovation as a dynamic process arising through the fluctuation and constraints in resources (e.g. Chalmers, 2013) and the changes in societal needs through time (e.g. Mulgan, 2006), placing an emphasis on the capabilities fostered by relationships with external organisations. Specifically, the objectives of this research are to:

- 1. Develop a conceptual model for the social innovation process that illustrates the role of relationships at different stages of the social innovation process.
- 2. Develop an empirical approach towards the study of managing the social innovation process that identifies the external linkages developed by the social enterprise at different stages of the social innovation process.
- 3. Identify the drivers for developing relationships during the process of social innovation, and role of these relationships.

1.3 Contributions

Mulgan *et al.* (2007) have pointed out that although much can be learned from studies into both business and public innovation, they do not fully address the social field, arguing that the lack of knowledge is hampering those keen to support social innovation. Chalmers and Balan-Vnuk (2013) add that whilst much of the research to date has been focused on defining what social innovation is and the reason for its emergence or conceptualisation, little has been contributed towards "an understanding of how this type of innovation is enacted by organisations" (*ibid.*: 785).

The thesis aims to contribute towards the studies of social innovation. In line with the work of Chalmers and Balan-Vnuk (2013) the thesis aims to develop an understanding of how organisations are able to innovate in the pursuit of social goals as opposed to exploring the underlying reason as to why they do so. Moreover, the researcher presents a conceptual framework built on the existing literature of innovation, social innovation and the dynamic capabilities perspective to examine the relationships developed by social enterprises to harness the capabilities required for social innovation. More importantly, the researcher believes the thesis extends the work by Chalmers and Balan-Vnuk (2013) by addressing the gap in existing knowledge building on their suggestion on how to advance this field of study:

We believe that closer alignment with the long-established technological innovation paradigm (and its established theoretical tools) can provide further insight into the processes of social innovation – if only to demonstrate that social innovation cannot be wholly explained by established theories of innovation. This will help draw some conceptual boundaries around some of the terms being used to describe this form of innovative and entrepreneurial behaviour, and will build legitimacy for the evolving research field of social innovation.

(Chalmers and Balan-Vnuk, 2013: 806)

The researcher builds on established theories of innovation and presents a conceptual framework in the thesis that aims to give insight on the nature of the social innovation process. To contribute to the empirical studies in this field of research, the thesis takes a mixed methods approach to test the conceptual framework and model against empirical data to further the understanding of social innovation within social enterprises.

The conceptual model illustrates the process of social innovation in two stages as conceptualised by Nicholls and Murdock (2012). In each stage of the process, relationship drivers are identified, depicting the relationships with external organisations to harness capabilities that foster social innovation. The findings from both the quantitative and qualitative data support the model in that social innovation occurs in two distinct phases and that the capabilities developed by engaging in relationships with external organisations in the first stage of the process are positively influential to social innovation.

1.4 **Theoretical Perspective**

This section summarises the theoretical perspective used for the purpose of this research in examining the role of relationships in harnessing capabilities during the process of social innovation undertaken by social enterprises. The three sub-sections introduce the theoretical frameworks considered for this research. To commence, the field of innovation and the emerging research on social innovation is introduced. Its development from simplistic linear models towards complex frameworks (e.g. Rothwell, 1994a) and the concept of social innovation (e.g. Mulgan, 2006) is explained. The second sub-section presents an outline of the dynamic capabilities perspective and the implications of sourcing capabilities externally (Bessant *et al.*, 2012; Teece, 2007; Teece *et al.*, 1997). The final part draws these frameworks (Tidd and Bessant, 2009; Helfat *et al.*, 2007; Teece, 2007; Teece *et al.*, 1997) together in a new conceptual framework proposed by the researcher for the thesis.

1.4.1 Understanding Innovation and Social Innovation

Fundamental to understanding social innovation is understanding the concept of innovation. Innovation is far from a straightforward process and studies of innovation have progressed from simply products, services and processes to include for example, technological, market, organisational, and environmental innovation. At the organisation level, innovation is dynamic (Nelson and Winter, 1982, 1978 and 1977) and shaped by both internal and external factors. Beyond being a simply internal process, innovation is not achieved in isolation and is viewed as an interactive process involving a range of actors and influences from the external environment (Phillips *et al.*, 2006; Saad, 2004). Having evolved from mechanistic linear models towards more complex models, a focus on coccreation (e.g. Bessant and Tidd, 2011; Chesbrough, 2004; Freel, 2000; Rothwell, 1994a) and inter-firm learning within networks is evident, with exchange of information not only flowing inwards but also outwards from the organisation. Furthermore, the external environment extends not just from the sector or the industry but towards the 'ecosystem', emphasising external resources from innovation communities and surrounding networks (Teece, 2007; Chesbrough, 2004; Teece *et al.*, 1997).

With accelerating global problems, social innovation offers the potential to provide solutions to societal issues that have yet to be addressed adequately by existing products and services. Chalmers and Balan-Vnuk (2013) have noted, that there are predominantly three schools of thought: scholars that perceive social innovation as merely a new way of solving existing (old) social problems; those that view it as a process of institutional change and; the scholars who link this phenomena with social entrepreneurship and social enterprises. Although there has been much interest in this growing field, particularly following the burgeoning rhetoric relating to the 'Big Society' there is very little research relative to technological innovation. Nonetheless, despite the relatively few empirical studies and a general lack of widely shared concepts, the nature of social innovation is conceptualised to be reliant on the flows and exchanges of knowledge, expertise, technical skills and capabilities between a diverse range of organisations, external to the socially innovative organisation (e.g. Chalmers, 2013; Chalmers and Balan-Vnuk, 2013; Mulgan et al., 2007; Edwards-Schachter et al., 2012). Social innovation is not pursued and undertaken in isolation, but is perceived as a process that diffuses the conventional boundaries of sectors (Phills et al., 2008) through procuring, accumulating and reconfiguring capabilities to foster social innovation.

1.4.2 Dynamic Capabilities

The notable works by Teece and his colleagues on the dynamic capabilities framework provides the theoretical lens perspective used in the thesis. Teece *et al.* (1997) described dynamic capabilities as "[t]he firm's ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments" (Teece *et al.*, 1997: 515), later further expanding the definition to suggest that the dynamic capabilities' role was also:

(a) to sense and shape opportunities and threats,

(b) to seize opportunities, and

(c) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets.

(Teece, 2007: 1)

The dynamic capabilities approach illuminates the importance of matching and reconfiguring internal capabilities to the external environment, impacting the 'ecosystem' through which the organisation is influenced (Teece, 2007; Teece et al., 1997). This framework builds on the resource-based view (RBV) approach (Penrose, 1959). The RBV perspective views the firm as a bundle of resources with distinct qualities that contribute to the sustained competitive advantage of the organisation (Wernerfelt, 1984; Penrose, 1959). Attributes of such resources may include its value, rarity, inimitability, and unavailability of substitutes (Barney, 1991). Critiques of the RBV theory speculate that it is too static to be effective in turbulent industries (e.g. Teece *et al.*, 1997). Teece (2007) also elaborates that external sources of resources should be recognised as a possible means to compete as research or productive capabilities may lie external to the enterprise and this should not be overlooked. There are extensive discussions of 'dynamic capabilities' that emphasise the role of organisation-level learning processes, especially its importance in enabling the process of innovation (Bessant et al., 2012). The challenge for organisations is to develop and facilitate the development of new capabilities to manage the process of innovation *(ibid.).* This may be particularly relevant for social enterprises as it is suggested through the literature that, in order to keep abreast of developments in the market in their pursuit of social innovation, social enterprises must manage erratic flows of resources and resource constraints (Chalmers, 2013; Mulgan, 2006).

1.4.3 Development of a Conceptual Framework for the Process of Social Innovation In order to examine the role of external relationships in building capabilities involved in the social innovation process, a synthesis of pertinent frameworks from innovation management (Tidd and Bessant, 2009), social innovation (Nicholls and Murdock, 2012), and the dynamic capabilities perspective (Helfat et al., 2007; Teece, 2007; Teece et al., 1997) is presented in order to build a new conceptual framework and model. The model illustrates social innovation as a two-stage process: 'seizing and selection' and 'scaling and implementation'. Each stage invokes elements that depict the drivers for developing relationships with external organisations that harness dynamic capabilities during the process. The seven relationship drivers were adapted from the innovation index project by NESTA (Roper et al., 2009) together with those employed in the Community Innovation Survey 2006 (CIS6), which has evolved from the Oslo Manual (OECD, 2005), a conceptual manual that provides guidance on conducting innovation surveys. The relationship drivers were: (a) to access new stakeholders, (b) to access new communities, (c) to access new markets, (d) to exploit new opportunities, (e) to build expertise, (f) to develop new knowledge and (g) to gain new skills. The conceptual model plots these drivers to illustrate the inflows and outflows of capabilities through external linkages. The conceptual model is tested against the empirical data and used to analyse the nature of social innovation, the role of organisations and institutions within the two stages of the process and the capabilities that foster the social innovation process and social innovations.

The quantitative data support the conceptual model, revealing that the process of social innovation occurs in two distinct phases through performing Categorical Principal Components Analysis (CATPCA). Following this, the hierarchical regression supported one of two hypotheses, which proposed that the relationships engaged by social enterprises with other organisations that build internal capabilities in the first stage, 'seizing and selection', are positively related to social innovation performance. From further investigation however, data from the interviews also suggest the positive influence of capabilities developed in the later stage of the social innovation process for 'scaling and implementation'. The findings also brought to light other themes that have emerged through the interviews such as the difficulties the majority of social enterprises face in terms of the lack of business acumen, and the role of social media in networking and information sourcing. The next section introduces social enterprises in the UK to set the context of the research.

1.5 Research Setting: Social Enterprises in the UK

The setting and unit of analysis for the thesis is the social enterprise. Social enterprises are increasingly recognised for their role in social innovation (Dees and Anderson, 2006) and play a central role in driving social innovation, exploiting limited resources in an everchanging environment as a means to tackle a spectrum of social issues. Social innovation can encapsulate other types of innovation within it, so that these different types of innovation are not mutually exclusive.

Social enterprises were initially thought of as new structures developed in response to the decrease in private funding and government subsidies that could provide innovative solutions in the face of financial difficulties (Wood, 2010). Increasingly, social enterprises are no longer perceived as simply a financial response to capital famine (Dees, 2008). Their links to economic and social programmes are being recognised as playing a central role in social innovation (Goldstein *et al.*, 2010; Dees and Anderson, 2006).

The role of social enterprises goes beyond as simply a funding mechanism for non-profit schemes and there is a need to recognise their role as important innovation actors (Dart, 2004) engaging in continuous innovation, adaptation and learning to serve their dual purpose responsibility to the constituencies they cater for and create an impact (Dart, 2004). Due to the nature of the environment in which they operate, (e.g. constantly shifting societal needs, and changing social issues, and major funding fluctuations), the social enterprise's capacity to continuously improve and develop their knowledge bases, products and services, and structure is critical to the firm's survival and competitiveness in the market (Johannessen *et al.*, 1999). Defourny (2001) argues that social enterprises play a significant role in organisational and structural innovation, and differ from conventional private or public sector firms by the increasing involvement of diverse partners, salaried employees, voluntary workers, users, supporting organisations and local authorities (*ibid.*). In particular, social enterprises provide developments in the field of work-integration of unskilled people (*ibid.*) and as such, employees and volunteers are not selected via the conventional process often used in non third-sector organisations.

Ruvio and Shoham (2011) describe social enterprises as by-products of social entrepreneurship, and are mostly influenced by a business approach to their activity and are focused on outcomes for a particular community or group of stakeholders (Chell,

2007). Shaw and Carter (2007) identify the objectives of social enterprises as being socially rather than profit-driven, although as Emerson and Twersky (1996) and Chell (2007) points out, social enterprises are concerned with the 'double bottom line'; being financially and socially motivated to perform. These non-profit private organisations address a societal need that is yet to be fulfilled or that is currently inadequately met. As such, social enterprises move away from the end of the spectrum where conventional for-profit organisations are categorised where their existence is to create purely economic value, towards another end of the spectrum of creating social value. Dual mission organisations may have structures that originate from for-profit business but have been modified to serve the social value creation aspect of the mission, thus forming a new business model. Scholars in the United States (US) term these new business models 'hybrid' models and organisations, for example the Benefit Corporation and the Low-Profit Limited Liability Company (L3C), which exist in the US (Reiser, 2010).

The research studies the social enterprises of the United Kingdom. Recent studies indicate the significance of UK social enterprises, estimating that there were approximately 68,000 social enterprises in the UK in 2010 (BIS, 2010). Official statistics indicate that these social enterprises are contributing at least £24 billion to the UK economy. Moreover, recent research suggests that the sector is in fact much larger and the number of social enterprises could be between 217,400 and 349,500 (UK Government, 2013). Although there is no agreed definition, for the purposes of this study, social enterprises are defined as entrepreneurial organisations that operate for two main purposes: first, for economic purposes, creating surplus revenue for economic sustainability, in order to remain functional and second, to create social value (Alter, 2007).

1.5.1 Defining Social Enterprises

The term social enterprise has no agreed definition, many descriptions of social enterprise build from a premise of frame-breaking and innovation in the social sector (Grenier, 2002; Leadbeater, 1997; Emerson and Twersky, 1996). Much of the research clarifying the emerging concept of social enterprises often causes confusion as this term encompasses a broad range of different organisational types and practices offered by different authors (Teasdale, 2011; Simmons, 2008; Alter, 2007). The term often includes organisational forms that evolved from the non-profit, co-operative and even conventional business (Defourny and Nyssens, 2010; Alter, 2007). Adding to the confusion, 'social enterprise' is perceived differently around the world.

There are two distinct schools of thought when using the term 'social enterprise' in the US and in Europe. In the US, scholars such as Dees (1998) use 'social enterprise' to refer to market-based approaches to tackling social problems (Kerlin, 2006), or "revenue raising activities undertaken by non-profit organisations" (Teasdale, 2011: 4) whilst Kanter and Purrington (1998) use the term to refer to for-profit organisations that provide public or social goods, operating in and/or around the social sector.

In Europe, 'enterprise' is an organisational unit (Spear, 2006) whilst 'social' was initially a collective organisational term (Teasdale, 2011), for example, the co-operative, which is thought as the dominant organisational form (Defourny and Nyssens, 2010). Some European scholars, such as Harding (2010), use the term to include for-profit organisations and other academics use the term to refer to community enterprises (Tracey *et al.*, 2011), both of which operate a range of income sources. Meanwhile, Williams (2007) argues that it is possible to distinguish organisations named 'social enterprise' whose primary objective lies with social purpose from organisations whose priorities are economic value and profit generating. Following that logic, Teasdale (2011) uses this distinction of objectives to clarify which organisations should be termed 'social enterprise' and other organisations that would lie under 'social business'.

Social Enterprise UK (2014), an organisation with social enterprise members included in this study indicates that social enterprises should:

- Have a clear social and/or environmental mission set out in their governing documents;
- Generate the majority of their income through trade;
- Reinvest the majority of their profits;
- Be autonomous of the state;
- Be majority controlled in the interests of the social mission;
- Be accountable and transparent.

Similarly, Thompson and Doherty (2006) suggest that social enterprises share the following characteristics:

- They have a social purpose;
- Assets and wealth are used to create community benefit;
- They pursue this with (at least in part) trade in a market place;
- Profits and surpluses are not distributed to shareholders, as is the case with a profitseeking business;
- "Members" or employees have some role in decision-making and/or governance;
- The enterprise is seen as accountable to both its members and a wider community;
- There is either a double- or triple-bottom line paradigm. The assumption is that the most effective social enterprises demonstrate healthy financial and social returns rather than high returns in one and lower returns in the other.

(Thompson and Doherty, 2006: 362)

Although there are an increasing number of businesses that operate complimentary activities on a corporate social responsibility level, these should not be mistaken for social enterprises who operate exclusively on this 'double bottom line' of value creation, unifying social and economic development principles. Additional to this dual mission, social enterprises are also said to play a role of change agents in the social sector by:

- Recognising and pursuing new opportunities to serve their mission;
- Engaging in a process of continuous innovation, adaptation, and learning;
- Acting boldly without limitations of resources;
- Exhibiting a heightened sense of responsibility to the communities served and for the outcomes and impact created.

(Adapted from Dart, 2004)

This dual mission also means that the benefactors of the firm are not shareholders but stakeholders; employees, owners, communities, in addition to addressing any social issue the enterprise seeks to serve. It is the emphasis on the social mission to improve the wellbeing of the public that often cause social enterprises to be confused with the public sector. Rainey *et al.* (1976) studied these differences and provide a useful table that summarises the key attributes of public sector organisations, differentiating them from social enterprises. Subsequently, social enterprises can be argued to be neither a public organisation nor a commercial enterprise due to their dual mission. The following table presents the attributes of public organisations (*ibid.*):

Торіс	Proposition
Environmental Factors	
Degree of market	Less market exposure results in less incentive towards cost reduction,
exposure	operating efficiency, effective performance and less availability of market
	performance indicators.
Legal, formal constraints	Higher level of constraints on procedures with greater tendency to
	proliferation to formal specifications and more external sources of formal influences.
Political influences	Greater diversity and intensity of external informal influences on decisions
	(bargaining, public opinion, interest group reactions. Greater need of
	support from constituencies or client groups.
Organisation-Environme	ent Transactions
Coerciveness	Likely that participation in consumption and financial services is
	unavoidable.
Breadth of impact	Broader impact and greater significance of actions due to wider scope of
	concern.
Public scrutiny	Greater public scrutiny of public officials and scrutiny over both economic
	and social goals.
Unique public	Greater public expectation that officials act with justice, responsiveness,
expectations	accountability and honesty.
Internal Structures and	
Complexity of	Greater multiplicity and diversity of objectives and criteria with higher
objectives, evaluation	levels of ambiguity and intangibility. High tendency of goals to be
and decision criteria	conflicting.
Authority relations	Less decision making autonomy and flexibility. Weaker and fragmented
	authority over subordinates. Higher levels of review, reluctance to delegate
	with greater use of formal regulations. More political, expository role for
	managers.
Organisational	Greater cautiousness and rigidity causing less innovation. Plans easily
performance	disrupted by political elections.
Incentives	Greater difficulty in devising incentives for efficiency and effectiveness.
Employee characteristics	Higher variation in personal traits and needs with lower levels of work
	satisfaction and organisation commitment.

|--|

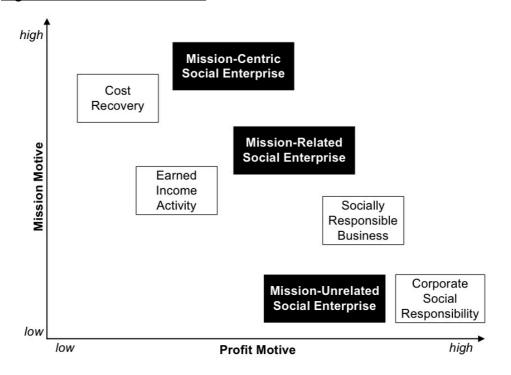
Source: adapted from Rainey et al. (1976)

However since social enterprises are not entirely public organisations, as the government does not own them, not all of the above applies; for instance, low autonomy and levels of innovation may not apply since social enterprises are privately owned, thus maintaining some of the private organisation attributes, but the low employee organisation commitment may apply due to the unconventional voluntary employee relationship. Defourny (2001) explains that social enterprises fall into what is known as the "third sector" where socio-economic initiatives belong neither to private for-profit nor the public sectors.

1.5.2 Forms of 'Social-Related Enterprises'

There are various forms of social-related enterprises. A notable work by Alter (2007) presents the 'Hybridity Spectrum' (Figure 6.1 below), which measures enterprises using two dimensions: the motives and extent to which the social enterprise is 'mission centric',

and also the level of integration. Mission-centricity is the degree to which the business operations are targeted at social value creation and the extent to which these operations are integrated into the overall business (Alter, 2007). Integration refers to whether the social program is unrelated, related or partially integrated, or fully embedded into the enterprise.





Source: Alter (2007) used with permission of the author

These aspects are important to consider as any organisation can engage in philanthropy, however, this does not deem the organisation to be a social enterprise. Some organisational forms operate non-profit activities (or more precisely, surplus-creation for survival) whilst others engage in social-value-creating business activities. Therefore, using these dimensions it is possible to distinguish a true social enterprise from a sociably responsible business or a corporation practicing social responsibility.

Alter (2007) explains that a social enterprise may be structured within an organisation, as a department, or as a separate legal entity. The purpose of these business ventures may be as asubsidiary acting as an additional mechanism to create funds for the social programme of the organisation, or as a sustainable program mechanism, supporting the organisation's mission (*ibid.*). For instance, Alter classifies 'socially responsible businesses' as mission-related, for-profit companies operating with the dual objectives of both creating profit for

shareholders whilst contributing to social benefits. These businesses are willing to comprise profit or donate substantial financial contributions towards social programs. In some cases, these businesses may be considered a social enterprise, when the business is registered as a for-profit subsidiary of a non-profit parent organisation that serves a social cause, thus operating as a financing mechanism to a larger organisation.

Social enterprises often take form as fully embedded mission-centric social enterprises – the central subjects of this investigation. Alter (2007) states that for these social enterprises, both its social program and entrepreneurial operation counterparts are central to the organisation's mission, formed exclusively for the purpose of advancing the mission by a self-financing mechanism. The target population (clients) is integral to the business model as direct beneficiaries, employees or owners of the enterprise (*ibid*.).

From Alter's (2007) work, it may be argued that a true social enterprise may be one that is mission centric, which is also most likely to be fully embedded and self-financing, thus an individual legal entity, whilst the other hybrid practitioners are merely enterprises with social programs. Similarly, Teasdale (2010) illustrates the concept by distinguishing different organisational types by the level of which the social mission is central to the organisation. Whilst Alter's (2007) typology identifies different organisation structures and how they engage in social creation using the two dimensions, it fails to clarify social businesses from social enterprises, and subsequently groups both together as social enterprises with different levels of social mission priority and business structures. Teasdale (2011) however furthers this mission-centricity or discourse concept by adding the notion of social businesses to the framework and clarifying the differences between social businesses and social enterprises. The emphasis of Teasdale's (2011) study lies in distinguishing social enterprises and co-operatives.

Social enterprises are distinct as the organisation prioritises their social or environmental purpose as central to the organisation's operation (Teasdale, 2011). Co-operatives, however, should not be coined under the same term due to these factors: the ownership, governance, and beneficiaries of the business mean that the business operates in an entirely different way to social enterprises. Co-operatives are jointly owned, and members who are active in decision-making processes and the creation of policies control those that are democratically governed (*ibid*.: 7). The key point which sets co-operative apart from social

enterprises is that, the beneficiaries or benefactors to the business is not the community or entire group of stakeholders, but only members of the business (Teasdale, 2011). These members are elected as representatives. Conversely, the benefactors of social enterprises are emphasised to be the stakeholders.

Consequently, for the purpose of this research, only mission centric social enterprises are investigated as it may be difficult to distinguish those hybrid enterprises that are 'socially responsible' from those practicing corporate social responsibility. The researcher acknowledges the difficulty in determining these debatable factors. Therefore for the purposes of this research, the definition employed is that by Alter (2007), whereby social enterprises are defined as entrepreneurial organisations that operate for two main purposes: first, for economic purposes, creating surplus revenue for economic sustainability in order to remain functional, and second, to create social value (*ibid*.).

1.6 Thesis Structure

The thesis consists of nine chapters. The next two sections discuss the chapter structure in more detail providing an overview of the thesis.

1.6.1 Towards the Theoretical Framework

The thesis aims to provide a conceptual framework that will assist the development of an enhanced understanding towards the social innovation process and how it can be managed and fostered. Cleary defined concepts are important for identifying relevant data and matching empirical findings with theoretical models. Thus, the first four chapters of the thesis aims to present the theoretical underpinnings of the research.

Fundamental to the research is the concept of the innovation process, more specifically, the social innovation process. Hence, Chapter Two provides an introduction to innovation, presenting a review of existing literature on the models of innovation, the degrees of innovation and the innovation process. The researcher aims to highlight the developments in the field of innovation management and the move towards viewing innovation as a complex interactive process influenced by multiple factors and therefore much more multifaceted than depicted in early linear models.

Chapter Three introduces the concept of social innovation. The chapter discusses the historical developments of social innovation historically and the emerging literature resulting from increasing interest in the phenomenon of social innovation, and shall explore the definitional debates and attempts to conceptualise social innovation. It is highlighted that social innovation is multi-faceted and the nature of social innovation comprises of co-creation, collaboration and working across conventional sector boundaries. The importance of harnessing cross-firm capabilities and utilising cross-fertilisation of resources and capabilities from external sources for social innovation underpins the literature.

Adopting the dynamic capabilities approach, Chapter Four identifies and reviews pertinent literature, commencing with the resource-based view, which provides the foundations of the dynamic capabilities lens. For the purpose of this study, the researcher employs the dynamic capabilities perspective to examine the role of external linkages and how it supports the exploitation of socially innovative opportunities.

Chapter Five builds on the review of literature to present a conceptual framework, developed from technological innovation models, studies of the social innovation process and the dynamic capabilities approach. It is proposed that the conceptual framework aids the understanding of social innovation through bringing together related concepts and theories from existing literature.

1.6.2 An Empirical Approach

In order to develop a sound investigation, a rigorous philosophical and methodological underpinning is required. Chapter Six explains the methodology supporting the research and subsequent methods in obtaining data. For the purpose of the research, a mixed methods approach has been adopted. The data collection strategy (a large-scale survey combined with semi-structured interviews) and the subsequent questionnaire design and interview protocols are presented in this chapter.

Chapters Seven and Eight present the findings for the quantitative and qualitative data respectively. Chapter Seven tests the conceptual model and the subsequent hypotheses using quantitative data. The chapter primarily aims to reveal the two stages of the social

innovation process by means of a Categorical Principal Components Analysis (CATPCA) and the influence of these two stages, comprising elements termed 'relationship drivers', on social innovation using a hierarchical regression. Chapter Eight presents findings from semi-structured interviews in a thematic form relating to the drivers of relationships derived from the conceptual model. Other emerging themes from the findings are also discussed. Chapter Nine synthesises and discusses the findings of the research from the two stages of data collection, and offers the final conclusions and contributions of the thesis.

1.7 <u>Summary</u>

This chapter has presented the research background and motivation, the aims and contributions of the thesis. It introduces the emergence of social innovation and social enterprises, new structures that have developed in response to social needs, which pursue innovative opportunities in order to address the growing problem of global societal issues. Following this, a summary of the theoretical perspective used for understanding dynamic capabilities and social innovation was outlined and the research setting of social enterprise was introduced. An overview of the existing literature was presented and proposes a synthesis of these conventional frameworks in a new conceptual framework to be introduced in this research to examine the social innovation phenomenon. The next chapter commences with the first of the three theoretical literature review chapters, discussing research in the field of innovation.

2 Innovation

2.1 Introduction

Innovation is far from a straightforward process. At the organisation level, innovation is dynamic and shaped by both internal and external factors (Saad, 2004), thus distinguishing one organisation from another organisation undertaking innovation. Studies of innovation have advanced from a focus simply on products, services and processes to include technological, market, organisational, and now, social innovation (e.g. Rothwell, 1994a). Innovation is influenced by many different factors influence innovation, such as technology and the market, towards embracing social and cultural factors (Saad, 2004). The strong influence of both the firm's internal and external environments on innovation is increasingly emphasised in the literature. Far from being a simply internal process, innovation is recognised as no longer being undertaken in isolation but viewed as an interactive process involving a range of actors and influences from the external environment (e.g. Phillips *et al.*, 2006; Saad, 2004).

The increasing complexities and pace of the external environment, particularly technological change, have forced organisations to "forge new vertical and horizontal alliances" (Rothwell, 1994a: 7) in their attempt to seek greater organisational flexibility to respond to market changes efficiently. Models of innovation have evolved from mechanistic linear models towards more complex models, a focus on co-creation (e.g. Coombs and Metcalfe, 2002; Rothwell, 1994a) and inter-firm learning within networks can be found within the literature (Bessant and Tidd, 2011), with exchange of information not only flowing inwards but also outwards (Chesbrough, 2004). In order to adapt to external market changes, organisations are strategically integrating and networking, employing external linkages (Rothwell, 1994a) to accumulate a toolkit that enhances developmental flexibility and efficiency of the organisation. Furthermore, it is becoming increasingly emphasised that the external environment extends from the sector or the industry towards the wider ecosystem, highlighting the importance of external resources from innovation communities and surrounding networks (Chesbrough *et al.*, 2006).

The purpose of this chapter is to provide an overview of the literature on innovation, commencing with key definitions of innovation. Following this, five generations of the models of innovation are presented, from depicting the development of innovation as a

learning process towards more complex and interactive models, acknowledging the flows of information external to the firm between a diverse range of actors, such as organisations, institutions and individuals. Innovation networks and strategic alliances for innovation are also briefly examined. The chapter then discusses the degrees and scope of innovation, looking at the impact of different levels of innovative change. The chapter concludes with a model of managing innovation, demonstrating the need to strategically manage innovation at different stages of the innovation process.

2.2 **Definitions of Innovation**

Innovation should not be confused with invention. Freeman (1982: 7) clearly distinguishes invention from innovation: "an invention is an idea, a sketch or model for a new or improved device, product, process or system", and defines innovation as the following:

An innovation in the economic sense is accompanied with the first commercial transaction involving the new product, process, system or device, although the word is used to describe the whole process.

(*ibid*.: 7)

Schumpeter's (1912/1934) work provided a foundation towards developing an understanding of innovation, recognising the importance of innovation in its role towards developing competitive advantage and economic change. Schumpeter (1912/1934) also distinguished innovation from invention and presented five ways in which innovation can occur:

- (1) The introduction of a new good that is one with which consumers are not yet familiar – or of a new quality of a good.
- (2) The introduction of a new method of production, that is one not yet tested by experience in the branch of manufacture concerned, which need by no means be founded upon a discovery scientifically new, and can also exist in a new way of handling a commodity commercially.
- (3) The opening of a new market, that is a market into which the particular branch of manufacture of the country in question has not previously entered, whether or not this market has existed before.
- (4) The conquest of a new source of supply of raw materials or half-manufactured goods, again irrespective of whether this source already exists or whether it has first to be created.

(5) The carrying out of the new organization of any industry, like the creation of a monopoly position (for example, through trustification) or the break-up of a monopoly position.

(Schumpeter, 1912/1934: 66)

Schumpeter indicates that the entrepreneur is endogenous rather than exogenous to the economic systems suggesting that innovation can involve change within the firm, its products, processes and services. Furthermore, the enterprise's capacity to innovate, continuously improve and renew its knowledge bases, products and structures (Johannessen *et al.*, 1999) greatly affects the way the firm adapts and remain competitive in a dynamic environment. Johannessen *et al.* (1999) adds that most organisations are deemed to require innovative skills in today's global economy in order to sustain their existence.

2.2.1 Types of Innovation

Product innovation refers to the development and introduction of new or improved goods and/or services, and similarly, process innovation is the adoption of new or improved methods of manufacture or distribution of a good or the delivery of a service (Neely *et al.*, 2001). The concept can encompass a wide range of areas beyond just product and process innovation. Technological innovation is the extension of this in a technology or technological setting. However, innovation is not limited to technology, product and service, organisational, market, financial and "business-model innovation" (Markides, 2006).

In demonstrating that it is not confined to product innovation Francis and Bessant (2005) place the innovation capability into four categories. It must be noted that the following four categories are not mutually exclusive and an organisation can pursue more than one at any given time. Furthermore, there are links between each and it is often the case that in the pursuit of one, the organisation would be achieving another. The four 'P's' of innovation capability is as follows:

- P1 innovation to introduce or improve products;
- P₂ innovation to introduce or improve processes;
- P₃ innovation to define or re-define the positioning of the firm or products;
- P₄ innovation to define or re-define the dominant *paradigm* of the firm.

(*ibid*.: 172)

However, as the authors state, the last point regarding 'paradigm' is somewhat contentious and has no general consensus by scholars (Francis and Bessant, 2005). Paradigm could be interpreted in two ways, 'inner-directed paradigms' and 'outer-directed paradigms', which they subsequently suggest could be translated as the culture of the organisation – "the way we do things around here" (Bower, 1966: 22), and the business model, respectively.

Innovation can also include organisational innovations, which involve changes in the management of the firm:

Innovation is conceived as a means of changing an organization, either as a response to changes in the external environment or as a pre-emptive action to influence the environment. Hence, innovation is here broadly defined to encompass a range of types, including new product or service, new process technology, new organization structure or administrative systems, or new plans or program pertaining to organization members.

(Damanpour, 1996: 694)

Market innovation on the other hand is concerned with the target market of the product or service. The purpose of this innovation is to identify new potential markets and new ways to serve or meet the demand of the target market (Johne, 1999).

Recently, there has been the emergence of environmental and social innovations, which are innovations with the purpose of creating social value and addressing environmental or social issues. Neely *et al.* (2001) points out that the OECD (1981) had included the social aspect in their definition of innovation as "all those scientific, technical, commercial and financial steps necessary for the successful development and marketing of new or improved manufactured products, the commercial use of new or improved processes or equipment or the introduction of a new approach to a social service" (OECD, 1981: 15-16). Thereby, innovation encompasses a wide range of aspects. The following section presents the models of innovation and the development of innovation, while social innovation shall be covered in depth in Chapter Three.

2.3 Models of Innovation

Models of innovation have developed from perceiving innovation as a zero cost activity, mechanistic linear models to the current understanding of innovation as an interactive process, including interaction with a wide range of actors. This section provides an

overview of these developments presenting Rothwell's (1994a) five generations, illustrating the move towards more complex forms such as the innovation network concept.

2.3.1 Development of Early Models of Innovation

Rothwell (1994a) presents a notable paper providing an overview innovation process modelled by outlining the four generations of technological innovation processes leading up to the development of the author's vision of the 'fifth generation'. Table 2.1 below summarises the features of each innovation process model:

Generation	Key features
First/Second	Simple linear models – technology push, market/need-pull.
Third	Coupling model – recognising the interaction between different elements and feedback loops between them.
Fourth	Parallel model – integration within the company, upstream with key suppliers and downstream with demanding and active customers. Emphasis on linkages and alliances.
Fifth	Systems integration and extensive networking. Flexible and customised response. Continuous innovation.

Table 2.1: Rothwell's Five Generations of Innovation Models

Source: adapted from Bessant and Tidd (2011)

The initial dominant view was the first generation of the innovation model built around the notion of the 'push' created by the discovery and creation of new technologies, namely 'research and development' (R&D), resulting in new successful products (Rothwell, 1994a). The perspective emphasises the importance of research and thereby this concept is referred to as the 'technology push' model of innovation as illustrated in Figure 2.1 below.

Figure 2.1: First Generation – Technology Push

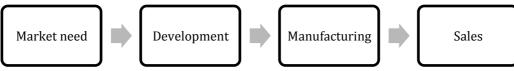


Source: Rothwell (1994a)

However, whilst this linear process depicts the scenario at the time of conceptualising the commercialisation of technological change, two key aspects have been neglected: the transformation process itself is overlooked (Carter and Williams, 1956) and the influence of the market and its demand is also disregarded (Cook and Morrison, 1961). Subsequently a second model was generated that addresses this.

The following "market pull" model of innovation (as shown in Figure 2.2) emerged after the perception of innovation shifted towards an emphasis on market demand, due to intensifying competition, stressed that the importance of strategic marketing and market share (Clark, 1979; Rothwell, 1994a). This second generation model illustrates the market as the driving factor of R&D, thereby having a responsive role in this process (Rothwell, 1994) as opposed to an initiating role as seen in the "technology push" model.

Figure 2.2: Second Generation - Market-Pull



Source: Rothwell (1994a)

However, Hayes and Abernathy (1980) state that there is a critical risk inherent in "marketpull" strategies, which is the danger of neglecting on-going R&D programmes for incremental adaptations of existing technologies, creating imitative rather than radically innovative designs. Therefore market-driven strategies over time can put organisations at risk of decreasing the capacity to adapt to radical market or technology changes (Rothwell, 1994a). Subsequently, a third generation model of innovation emerged (see Figure 2.3), displaying the interaction of the process, technological capabilities and the market demand, thereby opposing the linear, single-direction systems of the former models. This new model recognised that innovation was not simply a linear process. Rothwell and Zegvell (1985) describe this interactive, or "coupling" model as a logically sequential process that can be divided into distinct functional stages that are interacting and interdependent of each other. It is not necessarily a continuous process, but a complex net of intra- and extraorganisational communication paths (ibid.). These link in-house functions to the broader scientific, technological communities and the market. The innovation process is therefore set at the confluence of technological capabilities and market needs in an organisation (ibid.).

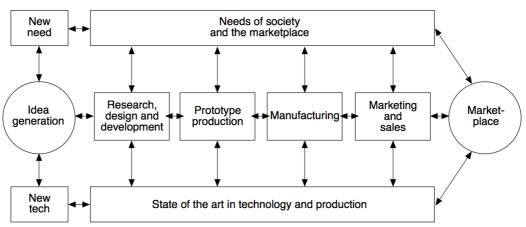


Figure 2.3: Third Generation - The "Coupling" Model of Innovation

Source: Rothwell (1994a) used with permission of the publisher

The model (Figure 2.3) remained fundamentally a sequential process, combining both the push from technological developments and also the demands of the marketplace, in addition to feedback loops (Rothwell, 1994a). Whilst this innovation model presented best practice up until the mid-1980s (*ibid.*), there were some concerns over the importance of each of the different factors, as some strong inter-sectoral differences became apparent (Rothwell *et al.*, 1974). Rothwell (1992) subsequently divided the factors into two categories, 'project execution' and 'corporate level'. Studies by Rothwell revealed that success or failure was multi-factored, and concluded that success is achieved by a competence in most tasks that are performed in a balanced and well-co-ordinated manner as opposed to excelling in one or two tasks performed outstandingly (*ibid.*). Rothwell (1994a: 11) also states that the key to "the successful innovation process were "key individuals" of high quality and ability; people with entrepreneurial flair and a strong personal commitment to innovation".

Strategic emphasis was put on core businesses and core technologies (Peters and Waterman, 1982), and organisations became increasingly aware of the strategic importance of evolving technologies and technological accumulation. As IT-based manufacturing technologies emerged, a new notion of manufacturing strategy became the new focus (Bessant, 1991). Leading Japanese firms were found to be innovating rapidly and more efficiently than their Western counterparts (Lamming, 1993) for two key reasons: integration and parallel development (Rothwell, 1994a). Their innovation process featured the integration of suppliers at an early stage of new product development whilst simultaneously integrating in-house activities with the concerned departments working in parallel with the process. This is demonstrated below in Figure 2.4, where Graves (1987)

gives an illustrative example of this integrated innovation model practiced by the Japanese automobile manufacturer, Nissan.

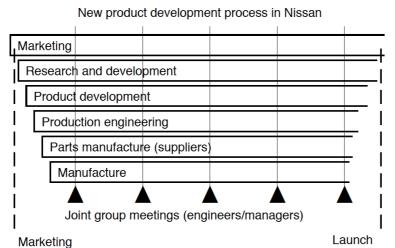


Figure 2.4: Fourth Generation – An Example of the Integrated Innovation Process

2.3.2 Towards the Fifth Generation

Rothwell (1994a) proposes a fifth generation innovation process, which emphasises characteristics such as greater organisational and systems integration, and external networking. The key aspects of the innovation model are: a) integration b) flexibility c) networking and d) parallel (real time) information processing (*ibid*.: 25). The fifth generation, named 'systems integration and networking' (SIN) has the following underlying strategic elements:

- Time-based strategy (faster, more efficient product development)
- Development focus on quality and other non-price factors
- Emphasis on corporate flexibility and responsiveness
- Customer focus at the forefront of strategy
- Strategic integration with primary suppliers
- Strategies for horizontal technological collaboration
- Electronic data processing strategies
- Policy of total quality control

(Rothwell, 1994b: 48)

Source: Graves (1987) from Rothwell (1994a) used with permission of the publisher

Rothwell (1991) argues that there is significant evidence for the importance of external communication and linkages, and that successful innovative organisations are those that are "well 'plugged in' to the market place and to external sources of technological expertise and advice" (*ibid*.: 96). Innovation within the organisation is depicted as a process of accumulating 'know-how' formed by a combination of in-house and external R&D (*ibid*.). As the economic environment becomes increasingly uncertain and turbulent, firms recognise the need for networks.

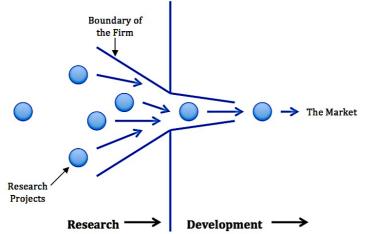
2.3.3 The Sixth Generation: Open Innovation

An emerging rhetoric discusses the 'sixth generation' model of innovation, which advocates the combination of both internal and external idea generation and development as a way of advancing technologies and innovation (du Preez and Louw, 2008). In this new alternative view of innovation, co-creation is seen as an increasingly important element in innovation (Bessant and Tidd, 2011), calling for a logic of 'openness', enabled by organisational networking and collaborations, stakeholders and the web community (Lindgren and Jørgensen, 2012; Koziol-Nadolna and Świadek, 2011; du Preez and Louw, 2008). This aligns with the 'open innovation' model (Chesbrough, 2004). Open innovation is a paradigm proposed by Chesbrough (2004) whereby it is assumed that "firms can and should use external as well as internal ideas, and internal and external paths to market" (*ibid.*: 23) as a means to advance their technology and by admitting additional ideas through external sources, it increases the possibility of innovation. Lindgren and Jørgensen (2012) note that, for this sixth generation model of innovation, the view on competencies being primarily focused on in-house competencies has to change towards an understanding that embraces competencies external to the enterprise.

Previously, when internal R&D was viewed as the strategic asset for innovation, the 'closed innovation' perspective meant that firms were self-reliant and adhered to the philosophy of "successful innovation requires control" (Chesbrough, 2003: 36). Chesbrough (2003) explains that this meant organisations exercised total control over their innovation processes, from R&D, developing, manufacturing and marketing, to distributing and services. Heavy investments into R&D meant that the most intellectual individuals were employed where possible and organisations were aggressively protective and controlling of this intellectual property (IP). However for most industries, this model became ineffective and inefficient towards the end of the 20th century when the number and mobility of knowledge workers increased dramatically (Chesbrough, 2003). Building on this abundance of knowledge the framework utilises and leverages the notion that knowledge is increasingly unrestricted by boundaries and highly mobile, and therefore accessible for innovation.

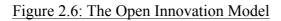
Figure 2.6 below illustrates the 'closed innovation' model whereby the firm operates strict control over its resources and operations, exercising self-reliance and protection of the internal R&D from diffusing out of the firm through its boundaries. For most of the twentieth century, this model dominated the R&D operations in many of the leading industries (Chesbrough, 2003).

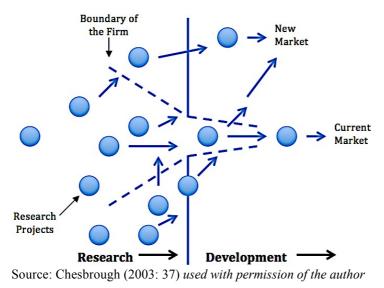
Figure 2.5: The Closed Innovation Model



Source: Chesbrough (2003: 36) used with permission of the author

In contrast, Figure 2.7 presents the 'open innovation' model, illustrating the porous boundaries of the firm by the use of dashed lines, and the fluid mobility of the resources moving between the two dimensions of the market and the firm.





Emphasis is placed on external resources that potentially create value for the organisation but are not owned by the organisation (Chesbrough and Appleyard, 2007), such as volunteers, innovation communities, ecosystems and the wider surrounding networks. It harnesses collective creativity by utilising "purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively" (Chesbrough *et al.*, 2006: 1). Additionally, it takes the view that internal ideas can also be marketed outside the organisation's current market via external channels to generate additional value. This notion of 'openness' is the collation of knowledge for innovation, where contributors can access other contributors' inputs but cannot exert exclusive rights over the innovative output (Chesbrough and Appleyard, 2007: 60).

Chesbrough (2003) presents the contrasting principles between 'closed innovation' and 'open innovation' and thus highlighting the advantages of the 'open innovation' framework, as summarised below in Table 2.3:

Closed Innovation Principles	Open Innovation Principles	
Research & Development		
To profit from R&D, we must discover, develop and ship it ourselves	External R&D can create significant value; internal R&D is needed to claim some portion of that value	
If we discover it ourselves, we will get it to market	We don't have to originate the research in order to	
first	profit from it	
Commerce	cialisation	
If we are the first to commercialise an innovation, we	Building a better business model is better than	
will win	getting to market first	
Intellectual property		
If we create the most and best ideas in the Industry, we will win	If we make the best use of internal <i>and</i> external ideas, we will win	
The smart people work for us	Not all of the smart people work for us so we must	
	find and tap into the knowledge and expertise of	
	bright individuals outside our company	
We should control our intellectual property (IP) so	We should profit from others' use of our IP, and we	
that our competitors don't profit from our ideas.	should buy others' IP whenever it advances our own	
	business model	

Table 2.2: Contrasting Principles of Closed and Open Innovation

Source: Adapted from Chesbrough (2003: 38), italics and emphases original.

Open innovation stresses the importance of external contributors, however the internal development of innovation should not be neglected. Using the innovation value chain framework and model, Ganotakis and Love (2012) demonstrate the importance of both internal and external linkages and sources of knowledge in a study of new technology-based firms. Findings indicate that internal and external R&D are complementary for product innovations, specifically, firms that have formal collaborations and external linkages are more likely to innovate (*ibid*.). In a similar vein, a study of innovation strategies and dynamic complementaries by Love *et al.* (2014a) finds that there is evidence that firms with both R&D and external linkages are more innovative than firms that had only one of the two or neither. More importantly, the authors argue that organisations are making strategic moves towards a strategy that has both internal R&D and external linkages, which is accompanied by improved innovation performance (*ibid*.).

Whilst many organisations are encouraged to embrace open innovation to realise the benefits from external sources of knowledge and R&D, Salter *et al.* (2014) highlights that there are internal barriers faced by 'open innovators'. The authors note that little attention has been paid to the barriers impeding open innovation and the 'micro foundations' of open innovation, namely the individual- or project- level actions that may affect the strategic outcomes (*ibid.*). Salter *et al.* (2014) indicate that open innovation requires significant changes to the internal routines, functions, norms and expectations related to

the R&D and supporting roles; open innovation requirements are often incompatible with existing routines (Salter *et al.*, 2014). Aligning with this, Love *et al.* (2014b) state that:

Openness to external knowledge partners involves a process of interaction and information processing in identifying and selecting appropriate partners, developing routines to interact with them, and constructing management systems to manage the relationships. Such activities are likely to be subject to a learning process, as firms discover through time which knowledge sources are most useful...most effective in delivering innovation performance and how best to manage them.

(*ibid*.:1703-1704)

The authors go on to cite Nelson and Winter (1982) and suggest that this process could be deemed as "development of improved innovation routines" (Love *et al.*, 2014b: 1704) or a "development of new or improved dynamic capabilities in external partnering" (*ibid*.:1704) from a RBV perspective following Zollo and Winter (2002). In their study, Love *et al.* (2014b) find that firms who have prior experience in developing and managing linkages gain greater innovative returns, suggesting that firms that consistently develop and engage in various linkages over time reap more benefits (*ibid*.).

User involvement is seen to play a key role as part of the innovation process, helping to define and shape innovation by contributing ideas to the process. Open innovation creates a network effect as consumers contribute directly to the service or product thus enhancing its value, quality and variety, and as the number of consumers increase, organisations that are producing complementary products or services are attracted (Chesbrough and Appleyard, 2007). In a similar vein, the importance of user involvement has been highlighted by Bessant (2005), and also by O'Regan (2012) who notes that "[i]nnovation is no longer a product or service offering to a customer but rather a co-creation exercise with an emphasis on the value offered/perceived by the customer" (*ibid.*: 194). From a different perspective, Birkinshaw and Duke (2013) advocate a bottom-up approach on innovation, suggesting the importance of employee-led innovation in a study of SMEs. The authors discuss the importance of fostering internal collaboration and creativity, beyond the confines of employees' assigned roles (*ibid.*).

Admitting external sources of technology not only increases greater opportunities for innovation, Chesbrough acknowledges it can also increase the complexities and uncertainties for evaluating this new technology (Chesbrough, 2004). Technological

uncertainty is often connected to market uncertainty. In the initial stages of a technology, its potential is often unclear, such as issues regarding how it may be used by customers and consumers, and the benefits it may provide. Adding to that, an uncertain market and how this new technology may address this uncertain market can be problematic (Chesbrough, 2004). "Evaluating the commercial potential of a new technology is less subject to measurement error when it addresses a current market with a known set of customers" (*ibid*.: 24). Therefore it is suggestive that user-driven innovation, which involves users and customers or consumers, can potentially reduce technology and market uncertainty.

Collaboration for innovation is a concept that has been well researched by the technological innovation literature. As the nature of innovation becomes more complex and sources of innovation become increasingly more diverse, collaborations became more of a regular occurrence. Dodgson (1994) notes:

The sources and the process of innovation are rarely confined within the boundaries of individual firms. Innovation is such a complex and uncertain activity it commonly requires the combination of inputs from a multiplicity of sources; from higher education institutes and contract research organizations, and from other companies as suppliers, customers and competitors. In order to retain some element of management control over these inputs, firms' relationships with these external organizations are often formalized into 'collaborations'

(*ibid*.: 285)

When such collaborations are amongst groups or clusters of innovating organisations or bring about the binding for groups of firms, these could be referred to 'innovation networks' (Dodgson, 1991).

Looking at the challenges in managing innovation, Bessant (2003) highlights the increasing shift towards inter-organisational networking, whether as supply chains, networks of small organisations sharing resources or larger networks sharing knowledge resources to product or service development. The key is to move away from operating and innovating in isolation. This is also a view shared by Smart *et al.* (2007) where inter-organisational networks are seen as a means for creating opportunities to access or exploit complementary resources and capabilities that reside beyond the boundaries of the organisation for innovation. Examining external linkages and product innovation in small firms Freel (2000) finds that small innovative firms are more likely to have relationships than non-innovative firms. In a study of supply chains Bessant *et al.* (2003) reiterate the importance of inter-firm learning. The authors justify the reason for looking at inter-firm

relationships by the need for concepts to be developed at a basic level prior to studying the complexity of larger structures such as networks (Bessant *et al.*, 2003).

The ability of the organisation to continuously develop and keep pace with the competitive threats and technological opportunities in the external environment is emphasised as a strategic requirement for building and sustaining future competitiveness (Bessant *et al.*, 2003). Sustainable competitiveness is enabled and enhanced by continuous learning within and between organisations via relationships and external linkages with other organisations. Bessant *et al.* (2003) offer the following reasons why networks or relationships are leveraged:

- there is a commonality of interest, focused on delivering value to a particular customer, and improvement of this core process along a supply chain and throughout a network;
- as a consequence of an increasingly competitive environment, there is (potentially) a growing motivation to learn;
- there are potential benefits to sharing the learning experience, including risk reduction, transfer of ideas, shared experiment.

(Adapted from Bessant et al., 2003: 168)

Concepts have emerged depicting the blurring of boundaries between sectors from interorganisation networks and innovative collaborations, such as the 'virtual enterprises' or the 'boundary-less organisations' (Bessant, 2003). On a larger scale, the increasing globalisation of firms and industries also entails that collaborations are strategically required (Lamming, 1993) for entry to the market and also overcoming international or governmental trade barriers, and accessing local know-how needed for expansion. Hamel *et al.* (1989) further this by adding that, "collaboration is competition in a different form" (*ibid.*: 134) and such collaborations are opportunities for learning.

Dodgson (1991) states that new technologies, such as technologies that were not previously related or not previously complementary as is often the case, demand both the breadth and depth of expertise, thus requiring a proficient partner for collaboration. Technological uncertainty refers to the considerations relating to the most appropriate configuration and the market for the technology (Dodgson, 1991). In a later work, Dodgson (1994) outlines three main forms of benefits that could be achieved mutually through partners:

- Increased scale and scope of activities: the outcomes of collaboration may be applicable to all partners' markets, and thus may expand individual firm's customer bases. Synergies between firms' different technological competences may produce better, more widely applicable products.
- Shared costs and risk: Collaboration can share the often very high costs, and therefore risk, of innovation (it also shares future income streams).
- Improved ability to deal with complexity: As Rothwell's (1994[a]) Fifth Generation Innovation Process shows, innovation is increasingly complicated, and closer strategic and technological integration between firms is a means for dealing with the complexity of multiple sources and forms of technology.

(Adapted from Dodgson, 1994: 286, emphases original)

Similarly Pisano *et al.* (1988) summarise the benefits of strategic collaborations into four 'classes of benefit': economies of scale and learning, access to an incumbent's superior capacities, risk reduction, and shaping competition. Some of the drivers for engaging in strategic collaborations noted above apply to international expansion or cross-market co-operation, however it can also be applied to cross-sector ventures. In a previous work, Teece (1986) puts forward the notion of 'complementary assets', which originates from the idea of sharing the assets required for operation between the collaborators. The author emphasises the identification of what assets are required of each firm as crucial for a successful collaboration, and subsequently goes on to stress that the importance of identifying, managing and organising complementary assets for undertaking innovation as the main issue in strategic collaborations.

Biemans (1992) highlights that different organisations provide different benefits when involved in the innovation process, such as the government, and universities and even competitors. Due to the fact that new products (and services) are becoming increasingly complex, technical knowledge is not always available in-house, or that the organisation is not always able to develop these capabilities internally, and therefore must obtain it from elsewhere, external to the firm (*ibid*.). These external sources may include research

institutes and even competitors where needed. Biemans outlines the possible support these external linkages could bring to the organisation and for supporting innovation:

The government can stimulate innovation through subsidies, universities and other research institutes can carry out basic research that leads to new technologies, knowledge brokers and transfer centres can bring the relevant parties together, and competitors can share the risks and costs of large development projects. Third parties may even be involved in the diffusion of innovations.

(Biemans, 1992: 85)

Aligning with this notion, there are some scholars whose work emphasises innovation as a social, inter-learning process, such as that of McElroy (2002), and view innovation as a social process, generated by interactions, social learning and networking in order to continuously innovate and survive. McElroy's proposition is to value the learning capacity of the organisation as a valuable asset in itself as opposed to just recognising the value in the output of such capacity given the hyper-competition in industries today. The suggestion is therefore that both social learning and innovation come hand in hand:

Recognizing not only a firm's intellectual output, but also its capacity to produce such output as a valuable intangible in its own right, is wholly appropriate in a world where survival has everything to do with a firm's capacity to sustainably outlearn and out-innovate its competitors.

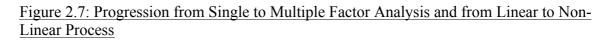
(*ibid*.: 32)

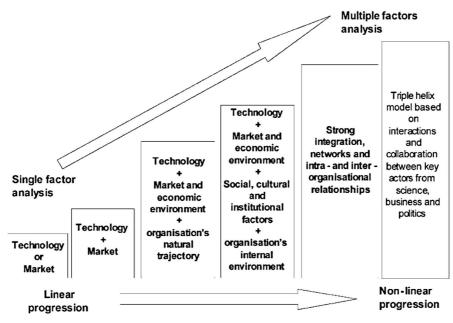
Whilst the sharing of resources and knowledge, and also good practice, is advantageous, it requires new routines that govern, for example, risk- and gain-sharing, or issues like trust (Lamming, 1993). Networks that span across sector boundaries or include a number or a wide range of organisations, offer significant advantages for developing innovation; in addition to assembling new sets of knowledge, the time and cost of developing such knowledge for the innovative outcome is greatly reduced (Bessant, 2003). However, Bessant (2003) warns that innovation networks are complex and difficult to implement. Lamming (1993) notes that in some cases the intended risk-reduction is often "outweighed by management and coordination problems" (*ibid.*: 88).

In a similar vein, whilst network centralisation can eliminate and avoid duplicating R&D and other procedures, Steinmueller (1994) notes that it can also suppress the variety in research outcomes for exploitation. This suggests the effects bureaucracy and exercising power or control has on inhibiting and limiting innovations. Dodgson (1994) furthers this by stating that another negative aspect of network collaboration may occur when collaborative agreements are formal and legally binding between a limited number of organisations, as the extensive and diverse informal information exchange between managers, scientists and other members may be reduced. It is often overlooked but it has been shown by studies of the sources of innovation that informal streams of information play an important role in the process of innovation (von Hippel, 1988). Therefore collaborations can teach organisations new approaches and methods not only technologically, but organisationally and managerially as well, which can conceivably alter the nature of the firm (Dodgson, 1994).

2.3.4 Innovation as a Multiple Factor Process

Saad (2004) illustrates each of the innovation models (Figure 2.5) as a progression from linear to a multi-factor process "derived from a high level of interaction and integration at intra-, inter- and extra-organization levels" (*ibid*.: 21) towards an extended framework of the "triple helix model". This framework highlights the fact that innovation is influenced by multiple factors, including external macro-factors as well as internal inter- or intra-organisational factors (Saad, 2004). From this model one can see that innovation is a complex interactive process consisting of many influential factors. Innovation is no longer a linear process to generate products or services, but involves technological and market factors, extending towards environmental, cultural and now social influences.





Source: Saad (2004) used with permission of the author

Whilst there are some organisations that focus, rely on and relate innovation with research and development, new approaches on innovation target the need for more flexibility and allowance for ambiguity in processes (for example discontinuous innovation and open innovation), so that there is room for improvement and growth.

Works of Nelson and Winter (1982, 1978 and 1977) establishes the view that innovation at the organisation level is dynamic and shaped by both internal and external factors. Managing the turbulent environment requires controlling risks, and the ability to change and respond quickly to emerging changes, controlling the direction and speed of the business to match the external conditions. In this light, the following section discusses the process of innovation and the influence of external factors and conditions.

2.4 The Process of Innovation

Bessant (2003) notes that through examining existing literature, it is suggested that, "managing innovation is about creating firm specific routines – repeated, reinforced patterns of behavior – which define its particular approach to the problem" (*ibid.*: 763). This notion is very similar to that described of organisational learning and how resources should be managed in that learning is a process of repetition and experimentation for competitive advantage (Teece *et al.*, 1997). Equally, the agenda of innovation is constantly shifting, therefore continuously learning and adapting established routines the organisation has developed is key to dealing with challenges that emerge from the environment (Bessant, 2003). It is also highlighted by Biemans (1992) that this continuous learning and active searching for innovation is caused by the shortening of product life cycles as technological developments are advancing in an accelerating manner.

Similarly, in the work of Bessant *et al.* (2005), the authors highlight that whilst most organisations work well under 'steady-state' conditions through their adaptive learning processes and well-established sophisticated routines, in unstable and unpredictable situations these routines become barriers and thus the organisations become unable to sense external signals and respond efficiently to threats, and opportunities and shifts in innovation:

The real challenge is in building the capability within the firm so that it is prepared for, able to pick up on and proactively deal with innovation opportunities and threats created by emerging discontinuous conditions.

(Bessant et al., 2005: 1368)

Organisations should learn new routines that can be structured and embedded as a capability by experimentation, imitating and adapting, and avoid becoming myopic and incumbent. Bessant *et al.* (2005) conclude that since the emergence of discontinuity is unpredictable, pre-planned models as a solution to such events are of limited value. Instead, Bessant *et al.* (2005) suggest a strategy of 'co-evolution', a shared learning experience of experimentation amongst players in the process to deal with discontinuous innovation. In line with this, Phillips *et al.* (2006) add that it is important to engage with a diverse range of organisations. Furthermore, it is proposed that such a model could be extended to learn how to manage discontinuous innovation by building "close links between researchers and innovating organisations with the common goal of shared learning about emergent 'good practice''' (Bessant *et al.*, 2005: 1374).

Due to the continuous and volatile changes in the market and technology, there are obvious pressures on organisations to improve learning capacities for identifying future opportunities and threats, and subsequently respond to these signals efficiently and effectively (Bessant *et al.*, 2005; Dodgson, 1994). Dodgson (1994) adds that organisations also face organisational introspection pressures to create strategies that align with existing methods. The author explains that collaborations do not only provide opportunities and possibilities for technological learning but also organisational and managerial learning. This refers to the learning about the methods for the creation of future technologies and how those methods and technologies may affect the organisation (*ibid.*).

Bessant (2005) presents a model that illustrates the managing of the innovation process in four stages: searching, selecting, implementing and learning. 'Searching' relates to the scanning of the internal and external environment for signals indicating threats, opportunities and change. The selecting stage is when the organisation must decide which of these signals to respond to and the appropriate response to the signal(s). 'Implementing' is the translation of these potential opportunities into action, turning ideas into something new and launching this in the internal or external market. This requires acquiring knowledge and resources in the initial stages, and the subsequent management of the

launch, and adoption of the innovation followed by mechanisms to sustain the adoption and revisiting, and modifying the innovation (re-innovation). The last stage is 'learning' whereby the enterprise could reflect and improve future management of the process, however the authors note that often this stage is overlooked or neglected (Bessant, 2005).

Tidd and Bessant (2009) present a model illustrating the management of innovation, which focuses on the stages of the innovation process and highlights these four key phases – searching, selecting, implementing, and capturing innovative opportunities (Figure 2.8). For each stage, the model demonstrates the capability to manage innovation as show below:

Figure 2.8: A Simplified Model for Innovation



Source: Tidd and Bessant (2009) used with permission of the publisher © John Wiley & Sons Ltd. 2009

The authors also highlight that innovation can be triggered by various stimuli, by the form of technological opportunities, changing market requirements, legislative pressure, social conditions (Bessant and Tidd, 2011), a point also explicated by Saad (2004). Whilst "[i]nnovation is widely seen as a critical imperative for survival and growth of firms... responding to this challenge needs to be balanced against the resource constraints of the organization in terms of money, skills, time and knowledge base" (Francis and Bessant, 2005: 182). Teece *et al.* (1997) had also highlighted that (technological) opportunities may not always be exogenous as often, opportunities are driven by innovative activity itself.

2.5 Degrees of Innovation

Concerning technological change and technological innovation, the notion that the nature of the different forms of innovation each has its own competitive effects, has been an important theme ever since Schumpeter's (1942) emphasis on creative destruction. Subsequently, scholars have attempted to categorise the various forms of innovation in terms of their impact on the established capabilities of a given firm (Henderson and Clark, 1990). In addition to the forms of innovation discussed above, there are various degrees of innovation. Initially, the degrees of innovation were categorised into two – incremental or radical. These terms were also seen to be interchangeable with the terms, evolutionary and revolutionary, or steady state and discontinuous, by various researchers and scholars (Francis and Bessant, 2005). There is much debate in the literature over the typology with terminology being vague and often used interchangeably, blurring the two concepts of innovation and innovativeness (Garcia and Calantone, 2002). Much of it lies within the new product development literature where there is a plethora of definitions for innovation types, resulting in ambiguous utilising of the terms 'innovation' and 'innovativeness' (*ibid*.: 110). Thus for the purpose of this research, the pairs of terms incremental and evolutional, radical and discontinuous will be seen as interchangeable terms. However radical, revolutionary or discontinuous innovations should not be confused with disruptive innovation (Markides, 2006; Henderson and Clark, 1990).

Incremental innovation refers to the introduction of small improvements and relatively minor changes, reinforcing the dominance of reputable firms by exploiting the potential of the initial established design (Tushman and Anderson, 1986; Ettlie *et al.*, 1984; Nelson and Winter, 1982). As adapted from Bessant and Tidd (2011), the matrix in Figure 2.9 below illustrates incremental and radical innovations against component or system level with some examples:

i igure 2.9. i ypes of innovation	Figure 2.9: T	ypes of Ir	novation
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SYSTEM LEVEL	New versions of motor car, aeroplane etc.	New generations (e.g. MP3 and downloading vs. CD and cassette music)	Steam power, ICT 'revolution', bio- technology
COMPONENT LEVEL	Improvements to components	New components for existing systems	Advanced materials to improve component performance
	INCREMENTAL		RADICAL
	'Doing what we do	'New to the	'New to the world'
	better	enterprise'	

Source: Bessant and Tidd (2011) used with permission of the publisher © John Wiley & Sons Ltd. 2009

Francis and Bessant (2005) define the two major categories of innovation as 'steady state' and 'discontinuous' innovation. 'Steady state' or 'incremental' innovation is where the organisation improves current processes and operations incrementally under stable conditions (Bessant, 2005). However, Francis and Bessant (2005) also explains that rigid and precise objectives associated with 'steady state' innovation in stable conditions often prevent innovation from happening or emerging; the need for vision and long-term strategies is emphasised as opposed to short-term objectives. Whilst incremental innovation does not usually involve dramatically new science, it may result in significant economic consequences in extended durations of time and requires considerable skill and resources to achieve this capacity (Hollander, 1965). Thus, this nature of innovation is relatively practical, especially for established firms, to adopt.

On the other hand, radical innovation poses greater challenges for established firms whose processes and resources have been established for a period of time. Radical innovation is primarily based on a significantly different set of engineering and scientific principles that often address new markets and potential applications (Dewar and Dutton, 1986; Ettlie *et al.*, 1984). Similarly, Henderson and Clark (1990) add that radical innovation reconfigures the fundamental architectural links in a product concept. Moreover, Francis and Bessant (2005) state that organisations with a discontinuous innovation nature tend to have less defined rules and are path independent, reliant on emergent routines and peripheral vision on the environment. Subsequently, this form of innovation can become the basis for successful new entrants to a market or even the redefinition of an industry (Henderson and

Clark, 1990). Radical innovation forces established organisations to adapt and develop new technical and commercial skills, and new approaches to devise solutions to the problems that arise (Ettlie *et al.*, 1984; Tushman and Anderson, 1986). Therefore, radical and incremental innovations have significant competitive consequences as they demand different organisational capabilities (Henderson and Clark, 1990), and organisational capabilities are difficult to create and develop, and costly to adjust (Nelson and Winter, 1982).

The matrix presented by Henderson and Clark (1990) as shown in Figure 2.10 conveys the idea of classifying different kinds of innovation using two dimensions; the impact on components is captured by the horizontal dimension, and the impact on component linkages is captured by the vertical dimension (*ibid*.). However, it must be noted that despite the distinctions in the framework between each form of innovation, they are matters of degree and that it is not intended to create boundaries or restrict the dimensions by which these forms of innovation are defined (*ibid*.). The purpose of the matrix is to suggest that a given innovation may be for example, less radical or more architectural in accordance to the scales of the two dimensions, as opposed to being either one of the other as it appears in quadrants on the diagram. As Figure 2.10 illustrates, radical and incremental innovation are at the extreme points of both dimensions; the former establishes a new dominant design, thus a new set of core design concepts are linked by a new architecture embodied in components, whilst the latter refines and improves individual components in an established design, but leaves underlying core design concepts and the links as before (*ibid*.).

Henderson and Clark (1990) explain that although much significant insight has been produced by the distinction between these two forms of innovation, incremental and radical, the concept is fundamentally incomplete. In the case of technical innovations, there are an increasing number of cases where innovations involve modest changes to existing technology but have resulted in fairly dramatic competitive consequences (Clark, 1987). Subsequently, Henderson and Clark (1990) present us with two additional categories of innovation, 'modular' and 'architectural innovation' (see Figure 2.10 below), to help explain minor innovations with such significant consequences which the existing model of radical and incremental innovation provides little insight.

		Core Concepts		
e nts		Reinforced	Overturned	
s between Core and Componen	Unchanged	Incremental Innovation	Modular Innovation	
Linkages Concepts a	Changed	Architectural Innovation	Radical Innovation	

Figure 2.10: A Matrix Framework Defining Four Forms Technological Innovation

Source: Henderson and Clark (1990:12) Administrative Science Quarterly. Used with permission of the publisher

Henderson and Clark (1990) define 'architectural innovation' as innovations where the links between the components of a product are reconfigured, yet the core design concept(s), the underlying basic knowledge, remains unmodified (*ibid*.: 10). This suggests that the way components are combined and configured are changed but the fundamental components themselves remain the same. Thus, Henderson and Clark (1990) contend that the effectiveness of a firm's architectural knowledge is destroyed but the usefulness of its knowledge of the product's components is preserved. Using terms originating from the design literature (Marples, 1961; Alexander, 1964) and manufacturing, Henderson and Clark distinguish between the product in its entirety – the system – and the parts of the products – the components – in their definition of 'architectural innovation'. Henderson and Clark (1990) explain that:

the distinction between architectural knowledge and component knowledge, or between the components themselves and the links between them, is a source of insight into the ways in which innovations differ from each other.

(*ibid*.: 11)

Henderson and Clark (1990) explain that the essence of architectural innovation lies with the configuration of existing components in new ways. It is often triggered by a change in an existing component of a given established product that prompts the creation of new interactions and linkages with other components (*ibid*.). However, although this does not imply that the components themselves are unaffected by the innovation, the core design concept and associated knowledge remains the same. The authors emphasise the need to continuously change internal capabilities by reconfiguration of resources in order to keep abreast of technological changes in the market, otherwise seemingly minor innovations can cause significant impact on an incumbent firm. New routines are often required for

integration and coordinating tasks for architectural innovations (Teece and Pisano, 1994). This may be the reason why architectural and radical innovations are often introduced by new entrants to an industry (Teece *et al.*, 1997). Incumbent organisations develop distinctive processes, but these processes are unable to support new technology, despite similarities. This mismatch of organisational processes meeting requirements for existing product or services and the requirements to support new products and services can explain the inability of incumbent firms to introduce new technology. Teece *et al.* (1997) illuminates that radical organisation reforming is usually required in these situations.

Importantly, Henderson and Clark (1990) note that the terms radical and incremental innovation should not be disregarded, but the aim is to acknowledge innovations that also create a degree of innovation but the emphasis is on the internal innovating elements themselves and the fact that the innovation is created through reconfiguration of existing core elements:

The distinctions between radical, incremental, and architectural innovations are matters of degree. The intention here is not to defend the boundaries of a particular definition, particularly since there are several other dimensions on which it may be useful to define radical and incremental innovation. The use of the term architectural innovation is designed to draw attention to innovations that use many existing core design concepts in a new architecture and that therefore have a more significant impact on the relationships between components than on the technologies of the components themselves.

(*ibid*.: 13)

In addition to the frameworks that categorised innovations into radical, incremental, discontinuous and steady state innovations, a new innovation termed 'disruptive innovation' emerged (Christensen 1997/2013; Bower and Christensen, 1995).

2.5.1 Disruptive Innovation

Christensen (1997/2013) extends the innovation debate, introducing the concept of disruptive innovation. As the name suggests it is an innovation that disrupts existing markets, technologies, products and services and eventually displaces established competitors. Originally primarily depicting disruptive technological innovations (Christensen 1997/2013; Bower and Christensen, 1995), Christensen broadens it later to encompass products and business models. The fundamental feature of disruptive innovation is that it will:

challenge industry incumbents by offering simpler, good-enough alternatives to an underserved group of customers, catalytic innovations can surpass the status quo by providing good-enough solutions to inadequately addressed social problems (Christensen *et al.*, 2006: 96).

In Bower and Christensen's work (1995), the authors categorise innovations using the concept of 'performance trajectories', thus placing innovations into two classes, sustainable innovations and disruptive innovations. The authors explain that most products and services are sustaining innovations, which provide improved quality or functionality. These innovations are named sustaining innovations, as they tend to maintain a rate of improvement, which can be incremental, breakthrough or 'leapfrog' improvements. Furthermore, these innovations give improved attributes that are familiar and already valued by the consumer or customer.

Conversely, disruptive innovations introduce products or services that consist of an entirely new or different package of attributes (Bower and Christensen, 1995) and do not meet the market as well as existing products or services, as they lack features or capabilities, but appeal to a new market or typically, less demanding customers and consumers (Christensen *et al.*, 2006). However, sustaining and disruptive innovations originally focussed on technological innovations. Markides (2006) contends that, despite Christensen widening its application later on to include other innovation types (e.g. Christensen *et al.*, 2006), it is unfitting to include all types of innovations into these two performance trajectory classifications. Markides (2006) indicates that whilst all these innovations may be disruptive to incumbents, a disruptive technological innovation or a disruptive product innovation. Citing Henderson and Clark, Markides notes:

These innovations arise in different ways, have different competitive effects, and require different responses from incumbents. Lumping all types of disruptive innovations into one category simply mixes apples with oranges, which has serious implications on how we study disruptive innovations in the future (Henderson and Clark, 1990).

(Markides, 2006: 19)

Whilst disruptive innovations typically have a major impact on the industry structures, often creating social change in the process (Christensen *et al.*, 2006), they do not adequately address social needs. Social change is often unintentional as a result of disruptive innovations: "they are simply the by-products of pursuing a business

opportunity" (Christensen *et al.*, 2006: 96). Bridging between traditional and social innovation, Christensen *et al.* introduce a new form of disruptive innovation that does meet social needs, 'Catalytic Innovation': "[w]ith catalytic innovations... social change is the primary objective" (*ibid.*: 96). This new proposed framework is in a similar manner from the renowned original framework (*ibid.*). Catalytic innovation is the social counterpart to disruptive (commercial) innovation whereby the framework fundamentally applies the disruptive innovation model into the context of the social sector as opposed to commercial products and services (*ibid.*). Innovations that directly address social needs will be discussed in the next chapter vis-à-vis social innovation.

2.6 Chapter Summary

In this chapter an overview of the literature relating to the models, processes and the degrees of innovation has been provided. Various frameworks have been presented from linear, firm-based and interactive models (Rothwell, 1994a) towards the open model of innovation (Chesbrough, 2004) that recognise the roles of both internal and external resources contributing to the innovation process. Additionally, frameworks concerning the degrees of innovation (Henderson and Clark, 1990) and the impact of disruptive innovation (Christensen 1997/2013; Bower and Christensen, 1995) have also been discussed. Acknowledging the increasing range of innovation types progressing from simply technological, product and process to social innovation and the multiple factors that influence innovation, innovation is increasingly understood to be a complex and interactive concept. Concerning the impact of innovation, it has become apparent that social change is often created in the pursuit of addressing societal needs. The following chapter introduces social innovation and presents a review on the literature surrounding this relatively new field of research.

3 Social Innovation

3.1 Introduction

As the previous chapter highlights, studies of innovation have advanced from simply focusing on products, services and processes to include technological, market, organisational, environmental and now also social innovations. Whilst there has been extensive investigation into technological innovation, social innovation is a relatively under researched concept (Murray *et al.*, 2008; Mulgan, 2006) with very little theoretical and empirical studies on the nature of the social innovation process or the capabilities necessary to socially innovate (Chalmers and Balan-Vnuk, 2013).

Historically, social innovation is not a new concept and has been practiced for decades (Chalmers, 2013; Nicholls and Murdock, 2012). In nineteenth and twentieth century Britain, civil society pioneered new models of childcare, housing, community development and social care (Chalmers, 2013; Nicholls and Murdock, 2012). Governments in Britain have also led social innovations, such as the development of health and schooling systems as well as innovative financial services such as credit unions. More recently, UK policy measures for community welfare have resulted in the emergence of bottom-up approaches as endeavours are made towards the notions of the 'Big Society'¹ (Alcock, 2010).

Over the past 60 years the locus of social innovation has radically shifted (Chalmers, 2013) from predominantly state-led approaches such as healthcare systems, towards more locally embedded civil society organisations. However, social innovation is not just a civil activity (Mulgan, 2006). With increasing societal problems in social welfare, environmental and governmental and state systems, there has been a rise in interest in innovation addressing social problems. The definition this thesis uses is that social innovation can be defined as the "innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly diffused through organisations whose primary purposes are social" (*ibid.*: 146).

In more recent literature, social innovation is seen to be linked to non-profit (or not-forprofit) organisations, social entrepreneurs or social enterprises (Chalmers, 2013; Chalmers

¹ The 'Big Society' is the vision for a society with higher levels of personal, professional, civic and corporate social responsibility; where people collaborate to find solutions to improve their lives and their communities.

and Balan-Vnuk, 2013). Although much discussion centres around the process of social innovation in social enterprises, traditional commercial businesses also create social innovations. An increasing recognition of the cross-sector nature of social innovations is surfacing, transcending conventional boundaries of sectors to encompass interactions between a diverse range of actors: public sector organisations, not-for-profit organisations, private organisations and institutions (Phills *et al.*, 2008). Consequently, there is a distinct emphasis on the role of relationships, multi-stakeholders, diversity of partners and linkages to external knowledge and resources (Edwards-Schachter *et al.*, 2012; Ziegler, 2010; Phills *et al.*, 2008; Mulgan *et al.*, 2007).

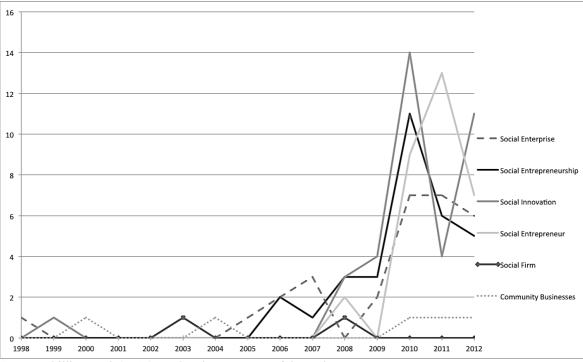
This chapter seeks to introduce and review the growing literature on social innovation by first introducing literature contributing towards the on-going discussion of defining social innovation. The following section then goes on to highlight the cross-sectoral nature of social innovation going on to present the literature, highlighting the role of external linkages in harnessing capabilities to support the process of social innovation.

3.2 Social Innovation

Research in the area of social innovation has grown over the past twenty-five years (Rana *et al.*, 2014; Nicholls and Murdock, 2012; Shaw and Carter; 2007; Christensen *et al.*, 2006; Dees, 1998; Leadbeater, 1997). Mulgan *et al.* (2007) notes that much can be learned from studies into both business and public innovation, however these do not fully address the social field or may not apply. Mulgan contends that this lack of knowledge is hampering those keen to support social innovation (*ibid.*). The graph in Figure 3.1 below illustrates a systematic literature reviewed conducted by the researcher. The review used five key terms related to social innovation, enterprises and entrepreneurship. The systematic literature review was performed following previous systematic literature reviews (Denyer and Neely, 2004; Pittaway *et al.*, 2004; Tranfield *et al.*, 2003). It is apparent that this approach gaining credence within the management research field, as it was previously more common in medical research.

The search terms were agreed by a panel of experts comprising of four practitioner experts and representatives from Knowing and Growing Ltd.² and Nesta³, which were then entered into the SCOPUS⁴ database to retrieve journal articles published between the year 1998 and 2012. The search results were then filtered by exclusion criteria⁵. As evident from Figure 3.1, interest has accelerated over the past five years, with a significant peak around 2010, triggered by the publishing of several special issue journals indicating the growing pertinence of research in this area. Furthermore, it illustrates the apparent strong link between social entrepreneurship and the social entrepreneur to social innovation conceptualised and emerging from the literature (Figure 3.1).

Figure 3.1: Social Innovation and Related Articles Published in the Past 15 Years



Source: Phillips et al. (2015) used with permission of the authors

The systematic literature review performed by the researcher resulted in an initial 1,369 papers. This was reduced down to 308 articles after applying the inclusion and exclusion criteria. Following review of the abstracts according to relevance and journal quality, 144

² Knowing and Growing Ltd is a company that brings growing innovative businesses together.

³ Nesta was formerly known as NESTA, National Endowment for Science, Technology and the Arts. It is an innovation charity dedicated to support innovation that improves well-being and the society.

⁴ SCOPUS is an abstract and citation database by the web-based Elsevier platform of peer-reviewed literature such as scientific journals, books and conference proceedings.

⁵ Please note that as part of the process, quality criteria were applied as propound by Pittaway *et al.* (2004) and subsequently, only articles from journals ranked three-stars or above using the ABS ranking remained.

papers remained. Lastly, duplicates were removed which further reduced the number of papers, resulting in a final total of 122 articles. Despite the apparent interest from a range of scholars and countries, the majority were US context studies (closely followed by the UK) and in fields such as entrepreneurship, general management and technology and innovation management. The full breakdown of the fields of studies the articles originate from is presented in Table 3.1.

Field of study	Total papers
Entrepreneurship	41
General Management	18
Innovation & Technology Management	14
Economics	12
Third-Sector Research	6
Business Ethics	5
Small Business Research	7
Interdisciplinary	6
Policy Studies	7
Health	1
Family Business	1
Knowledge Management	1
Operations Management	2
Sociology	1

Table 3.1: Breakdown of the Field of Stu	ly of the Selected Journal Articles
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The resulting papers arose from an array of disciplines, including: entrepreneurship, general management, innovation and technology management, economics, small business research and third-sector research. The journals most frequently publishing articles in these areas were identified as *Journal of Social Entrepreneurship, Entrepreneurship and Regional Development, Entrepreneurship: Theory and Practice, Journal of Business Ethics* and *International Journal of Technology Management*, suggesting a broad conceptual and theoretical underpinning, and interest from a range of disciplines. The review identified articles from a further 46 journals, which may be attributed to the fact that this is a new field of study that has yet to reach a mature state and hence draws on a number of different fields of study. In spite of this, it is clear that social innovation appears to be most strongly linked to the entrepreneurship research field. These findings are similar to those in a recent study by Rana *et al.* (2014), wherein a systematic literature review on social innovation in the public sector was conducted. Particularly, Rana *et al.* (2014) find that a number of diverse fields such as social entrepreneurship, design, technology and public policy are becoming involved in public sector social innovations (*ibid.*).

When the papers were further examined and categorised by country of origin – the country from which the researcher(s) originated – the United States had the strongest representation with 33 papers, followed by the UK (22), Canada (13), Australia (5) and Spain (5). This was expected as the search focused on English language journal articles, which would implicitly result in a bias towards research conducted in English-speaking countries or by English-speaking researchers.. There were 20 papers involving international research teams, suggesting that as international interest in social innovation and social entrepreneurship has developed, there has been a move towards sharing knowledge between researchers from different countries.

The systematic literature review found that there were a wide range of definitions of social innovation. This was supported by a survey of extant literature by Murray *et al.* (2008) identified a dearth of widely shared concepts, thorough histories, comparative research or quantitative analysis. Chalmers and Balan-Vnuk (2013) also concur in a more recent study, and adds that whilst much of the research has been focused on defining what social innovation is and the reason for its emergence or conceptualisation, "an understanding of how this type of innovation is enacted by organisations" (*ibid.*: 785) is required. The next section discusses the problem of defining 'social innovation'.

3.2.1 Defining Social Innovation

There appears to be no agreed upon definition of the term 'social innovation'. Pol and Ville (2009) note that the majority of scholars employ the term 'social innovation' but remain uncertain of its exact meaning. From the review of literature, an early reference to social innovation appears in 1998 in Kanter's recognition of the move by private organisations away from corporate social responsibility towards corporate social innovation. Kanter perceives social innovation as an opportunity in the social sector to develop ideas and produce innovations that not only serve new markets, but also provide community payoffs (Kanter, 1998). However, the definition most oft cited is that of Phills *et al.* (2008: 39): "a novel solution to a social problem that is more effective, efficient, or just than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals". Additionally, Chalmers and Balan-Vnuk (2013) note that many scholars see social innovation as a new approach to old problems (e.g. Mulgan *et al.*, 2007).

Social innovation is often confused with corporate social responsibility (CSR). Whilst social innovation is defined as an innovative activity directly intended to address societal problems, the notion of social awareness seems to be secondary, or indirect with CSR. The UK government states:

Corporate social responsibility recognizes that the private sector's wider commercial interests require it to manage its impact on society and the environment in the widest sense. This requires it to establish an appropriate dialogue or partnership with relevant stakeholders, be they employees, customers, investors, suppliers or communities. CSR goes beyond legal obligations, involving voluntary, private sector-led engagement, which reflects the priorities and characteristics of each business, as well as sectoral and local factors

(Dahlsrud, 2008: 10).

This signifies that commercial organisations are encouraged to develop appropriate practices that are responsible to the wider impact of their activities. As well as contributing to the good of society, 'strategic philanthropy' is a useful strategic tactic that can enable companies to achieve profit maximisation and market share objectives (Alter, 2007). A CSR program may be purely strategic with a goodwill by-product to improve organisation image. On the other hand, the aim of social innovation is to provide solutions to social needs, as opposed to creating these solutions as a by-product or a mechanism to improve profit or reputation.

Unlike technological innovations, which are driven by market and consumer needs, social innovations have a cultural focus, aspiring to address unmet human and social needs (Lettice and Parekh, 2010). For the OECD (2011), social innovation addresses market failures and encompasses processes or product, and involves new stakeholder and territorial relationships. Social innovations are innovative responses to unsolved or inadequately met social problems and needs that have been unsuccessfully addressed by the government or the commercial market:

Social innovation seeks new answers to social problems by: identifying and delivering new services that improve the quality of life of individuals and communities; identifying and implementing new labour market integration processes, new competencies, new jobs, and new forms of participation, as diverse elements that each contribute to improving the position of individuals in the workforce.

(*ibid*.: 20)

Social innovation is seen to bring about new processes to address issues concerned with the welfare and wellbeing of individuals and communities, including all stakeholders, both

consumers and producers (OECD, 2011). The following quote expresses the social outcome-driven nature of this perspective:

Social innovation is distinct from economic innovation because it is not about introducing new types of production or exploiting new markets in themselves but is about satisfying new needs not provided for by the market (even if markets intervene later) or creating new, more satisfactory ways of insertion in terms of giving people a place and a role in production.

The key distinction is that social innovation deals with improving the welfare of individuals and communities through employment, consumption and/or participation, its expressed purpose being to provide solutions for individual and community problems.

(OECD, 2011: 21)

Social change is also associated with social innovation (e.g. Cajaiba-Santana, 2014; OECD, 2011). Some scholars (Mair and Marti, 2006) see social innovation as "a process of enacting institutional change" (Chalmers and Balan-Vnuk, 2013: 786). A study by Adams and Hess (2008) defines social innovation as an idea representing "social change…a process that has distinctive preconditions and stages and those preconditions and stages can be understood and acted upon to promote innovation" (*ibid*.: 1). The perspective Adams and Hess take is that of public administration whereby, the focus is not on defining social innovation or the process so much as identifying the requirements and policies assisting it. They then go on to propose the potential of utilising social innovation as a form of public administration strategy.

Common features do however run through many of the definitions of social innovation, such as the objective of a social goal, diffusion of activities through organisations, products and processes resulting from new resource routines and social interactions or collaborations. The table below (Table 3.2) presents a select sample of definitions in the literature:

Author(s)	Definition	
Mumford	"The term social innovation refers to the generation and implementation of new	
(2002: 253)	ideas about how people should organize interpersonal activities, or social interactions,	
	to meet one or more common goals."	
Mulgan	"Social innovation refers to innovative activities and services that are motivated by the	
(2006: 146)	goal of meeting a social need and that are predominantly diffused through	
	organizations whose primary purposes are social".	
Phills <i>et al</i> .	"[N]ovel solution to a social problem that is more effective, efficient, sustainable, or	
(2008: 39)	just than existing solutions, and for which the value created accrues primarily to	
	society as a whole rather than private individuals".	
	"A social innovation can be a product, production process, or technology (much like	
	innovation in general), but it can also be a principle, an idea, a piece of legislation, a	
	social movement, an intervention, or some combination of them."	
Pol and Ville	"[A]n innovation is termed a social innovation if the implied new idea has the	
(2009: 881)	potential to improve either the quality or the quantity of life innovations conducive	
	to better education, better environmental quality and longer life expectancy are a few."	
Dawson and Daniel	"[S]ocial innovation can be broadly described as the development of new concepts,	
(2010: 10)	strategies and tools that support groups in achieving the objective of improved well-	
	being".	
	"social innovation are about resolving social challenges and meeting social goals to	
	enhance societal well-being".	
Murray <i>et al</i> .	"[Social innovations are] innovations that are social both in their ends and in their	
(2010: 3)	means. Specifically, we define social innovations as new ideas (products, services and	
	models) that simultaneously meet social needs and create new social relationships or	
	collaborations. In other words, they are innovations that are both good for society and	
XXX .1 1	enhance society's capacity to act".	
Westley and	"[Social innovation is] a complex process of introducing new products, processes or	
Antadze	programs that profoundly change basic routines, resource and authority flows, or	
(2010: 2)	beliefs of the social system in which the innovation occurs. Such successful social	
M	innovations have durability and broad impact".	
Moore and Westley	"[S]ocial innovations – that is, any initiatives, products, processes, or programs that	
(2011: 6)	change basic routines, resource and authority flows, or beliefs of any social system."	
Baglioni and	"The concept refers to the capacity of society (through not-for-profit organisations,	
Sinclair	charities, social movements and community groups, as well for-profit enterprises) to	
(2014: 409)	address needs unmet due to the failure or absence of markets or state provision. The	
	nature of the 'innovation' can be in the content (what action is taken) or the process of provision (how pade are mat)."	
	provision (how needs are met)."	

Table 3.2: Definitions of Social Innovation

Source: Adapted from Edwards-Schachter et al. (2012: 680) with additional definitions

A notable work is a study by of Mulgan *et al.* (2007) that presents insight in to what social innovation is and its importance. More importantly, the authors suggest ways of developing social innovation, so helping to conceptualise the process. Mulgan *et al.* describe social innovation as a process of change, resulting in new ideas for unmet needs. They draw on the evolution from linear to non-linear and more interactive models of innovation to explain the advantages of networks and clusters, and the general notion of relationships in the pursuit of addressing social issues. Consequently, Mulgan *et al.* (2007) propose the 'connected difference' theory of social innovation, which emphasises three key dimensions of social innovation:

- they are usually new **combinations** or hybrids of existing elements, rather than being wholly new in themselves
- putting them into practice involves **cutting across** organisational, sectoral or disciplinary boundaries
- they leave behind **compelling new social relationships** between previously separate individuals and groups which matter greatly to the people involved, contribute to the diffusion and embedding of the innovation, and fuel a cumulative dynamic whereby each innovation opens up the possibility of further innovations (Mulgan *et al.*, 2007: 5)

As evident above, the 'connected difference' theory highlights the critical role of relationships. This emphasis on collaboration extending beyond the boundaries of the organisation and sector, which contributes to the diffusion of innovation, aligns with the open innovation model advocated by Chesbrough (2004). The brokers, entrepreneurs and institutions that link the "people, ideas, money and power" (Mulgan *et al.*, 2007: 5), which the authors coin 'the connectors' in the innovation system, are described to be critical and contribute to lasting change, comparable to those of creators, activists and community groups.

Mulgan (2012) draws on current theoretical and conceptual works to suggest how these may be synthesised in a preliminary sketch for developing a better understanding of social innovation as a concept. The following points present some of the common issues and implications running through these conceptualisations of social innovation:

- Social innovations tend to originate in contradictions, tensions, and dissatisfactions that are caused by new knowledge, new demands and new needs that make the transition from being personal to being recognised as social in their causes and solutions.
- They depend on a wide array of actors, including social entrepreneurs, movements, governments, foundations, teams, networks, businesses, and political organisations, each with different ways of working, motivations, and capacities.
- Innovations gain traction only when they can attract vital resources, which include money, time, attention, and power.
- The processes whereby innovations develop have strong analogies with a much wider family of evolutionary processes that multiply options, select and then grow those best suited to the changing environment. However, it is misleading to focus on the invention and adoption of single innovations; instead they evolve in interdependent groups, and one set of innovations makes possible new ones.

- Innovations gain impact through being formalised, as pilots, ventures and programmes, and through dynamic processes of externalisation and internalisation.
- The fundamental goals of social innovation include the creation of socially recognised value, the promotion of greater well-being, and the cultivation of capabilities.

(Adapted from Mulgan, 2012: 34-35)

Nicholls and Murdock (2012) draw on similarities from the social entrepreneurship literature and innovation, applying these to social innovation. In examining the concept of social innovation, Nicholls and Murdock (2012) discuss innovation and then go on to consider what 'social' denotes. The authors offer the two categories of social innovation: levels of social innovation and dimensions of social innovation. Three levels of social innovation were identified, building on familiar terms seen in frameworks of its technological counterpart: incremental, institutional and disruptive. As can be seen from Table 3.3, the first level relates to innovation in products and services in order to address social needs more effectively or efficiently, that is incremental innovation. The second is innovation that aims to harness or reconfigure existing social or economic structures to generate new social value. This level of innovation is coined institutional innovation and is often "driven by experts repositioning new technology or intellectual capital" (*ibid*.: 4) to social goals as opposed to creating purely economic objectives. The final level of social innovation, disruptive innovation, depicts innovation aimed to alter social hierarchies and political systems.

Level	Objective	Focus	Example Organisation (Sector)
Incremental	To address identified market	Products and	Kickstart (low-cost irrigation foot pump)
	failures more effectively: e.g.	services	Aurolab (low-cost intraocular lenses)
	negative externalities and		Afghan Institute of Learning (female
	institutional voids		education)
Institutional	To reconfigure existing market	Markets	MPESA (mobile banking)
	structures and patterns to create		Institute for One World Health ('orphan'
	new social value		drugs)
			Cafédirect (Fair Trade)
Disruptive	To change the cognitive frames	Politics (social	Greenpeace (environmental change)
	of reference around markets and	movements)	BRAC (micro-finance)
	issues to alter social systems		Tostan (human rights)
	and structures		

Table 3.3: Levels of Social Innovation

Source: Nicholls and Murdock (2012: 4) Social Innovation: Blurring Boundaries to Reconfigure Markets. Used with permission of the publisher

Nicholls and Murdock (2012) go on to highlight that arguably, all innovations can been seen as social innovations in some perspective since all new products and services impact on people and their lives. The authors also bring to light that even innovation that do not have direct impact on human well-being or that do not demonstrate positive social effects typically require a form of social participation in the process of production or diffusion, which may be innovative. Nicholls and Murdock (2012) suggest that the concept of social innovation is very much dependent on where one positions the social aspect. Specifically, one may define social innovation only by the outcome of the innovation in terms of how it addresses social needs, or the social process and interactions can also be encompassed within the definition.

Presenting the 'Dimensions of Social Innovation' (Table 3.4), Nicholls and Murdock (2012) demonstrate that products or services have social processes or social outcomes, or indeed both. The dimensions represent actors analysed at three levels; micro, mezzo and macro (*ibid*.). The authors translate this as the individual, organisation and network, and system contexts as presented below (*ibid*.).

	Social Process (Example)	Social Outcome (Example)
Individual	Co-production	Lost-cost healthcare
	(Southwark Circle)	(Aravind Eye Hospital)
O secolarities	W/1 i was 1 stien	W. 1 internetion activity of the second
Organisation	Wiki-production	Work integration social enterprise
	(Wikipedia)	(Greyston Bakery)
Network/Movement	Open source technology	Non-traditional training and
	(Linux)	education
		(Barefoot College)
System	Micro-finance	Mobile banking
	(Grameen Bank)	(MPESA)

Table 3.4: Dimensions of Social Innovation

Source: Nicholls and Murdock (2012: 7) Social Innovation: Blurring Boundaries to Reconfigure Markets. Used with permission of the publisher

Nicholls and Murdock (2012) note that it is not their intention to revisit definitional discussions but to however highlight that the term 'social' in social innovation evidently creates interpretive challenges (*ibid*.). With this issue aside, what is abundantly apparent, is that social innovation is multi-faceted, thus highly complex to study.

It is important to note that commercial or private organisations do engage in social innovative activities or undertake social innovation. As Mulgan *et al.* (2007) states:

social innovation is not unique to the non-profit sector. It can be driven by politics and government (for example, new models of public health), markets for example, open source software or organic food), movements (for example, fair trade), and academia (for example, pedagogical models of childcare), as well as by social enterprises (microcredit and magazines for the homeless).

(Mulgan *et al.*, 2007: 4-5)

Porter and Kramer (2011) discuss the notion of 'Shared Value' whereby they blur the line between for-profit and non-profit organisations by marrying a commercial company's success with creating societal improvement. The authors explain that companies can simultaneously create economic value by creating social value, the result of linking competitive advantage and CSR. It is conceptualised that there are three distinct approaches to achieving 'shared value': "by reconceiving products and markets, redefining productivity in the value chain, and building supportive industry clusters at the company's locations" (ibid.: 67) and by doing so, it creates new opportunities and ways to "serve new demands, gain efficiency, create differentiation and expand markets" (ibid.: 67). It is contended by Porter and Kramer that this concept resets capitalism in that the 'right kind' of profit is the focus, profit that creates social benefits for the society. This contrasts profits that are made under traditional capitalist influences where companies generate short-term profits at the expense of societal needs (ibid.). One example is of Danone, the French food multinational company who partnered with Grameen Bank for the purpose of improving the health and diets of people in Bangladesh (Danone, 2014). Danone stresses that economic and social performance is reconciled as their social innovation strategy, they name the 'Dual Project'. This further supports the notion that unlike corporate social responsibility programmes, social innovation addresses social issues directly. Moreover, from observing such examples of social innovation, it should be highlighted that social innovation is not something done in isolation even for commercial or private organisations.

Whilst there is much research on the sources of innovation in the existing literature (e.g. von Hippel, 1988), in comparison there are relatively few studies of the factors promoting social innovation (Biggs *et al.*, 2010). Some studies that exist suggest that the following elements greatly facilitate social innovation:

- (1) Financial support specifically for innovation and innovative activities;
- (2) Incubation processes that nurture promising innovations in their early stages;
- (3) Visible encouragement and rewards for successful innovations from leaders;

- (4) Promotion of interactions across organisational, sectoral, or disciplinary boundaries;
- (5) Empowerment of users and stakeholders to drive innovation independently;
- (6) Opening of markets and governance processes to user groups and private and commercial organisations.

(Adapted from Biggs et al., 2010: 11-12; Mulgan et al., 2007)

The following sections outline the themes in existing literature on the nature of social innovation including conceptualised properties of the process and additional factors that may facilitate or drive social innovation towards success.

3.2.2 Crossing Sectoral Boundaries

Despite the extensive debate on defining social innovation, the pursuit of a social objective or mission is a prevalent theme running through much of the research into social innovation (Shaw and Carter, 2007; Dawson and Daniel, 2010; Ruvio and Shoham, 2011), whereby the pursuit of a social goal is reliant upon collective and dynamic interplay by actors who are working together to achieve social objectives and outcomes (Dawson and Daniel, 2010). This is in line with McElroy's notion of innovation as a social process, brought about by social learning and networking (McElroy, 2002). Phills *et al.* (2008) go on to suggest social innovation transcends sectors and levels of analysis, a notion that is supported Edwards-Schachter, Matti and Alcántara (2012) who view participation and collaboration amongst different sectors as a crucial aspect of social innovation. Murray *et al.* (2010: 3) stated that "[s]ocial innovation doesn't have fixed boundaries: it happens in all sectors, public, non-profit and private".

Phills *et al.* (2008) stress that recognising the role of cross-sector dynamics is critical. The authors believe that the exchange of ideas and values, and the shifting roles in relationships through the blending of public, philanthropic and private sectors, and their resources, is the most important implication for social innovation. The complexity of global problems often call for sophisticated solutions and moving away from the locked-in behaviour of the past, non-profit organisations, commercial businesses and government institutions have recognised their differences in knowledge and skills and subsequently combined forces to tackle these social problems. Non-profit organisations and government leaders sought the

commercial sector for management and entrepreneurship, performance measurement, and perhaps most importantly, revenue generation (Phills *et al.*, 2008). Equally, the non-profit sector was able to educate commercial businesses and government institutions on philanthropy and social and environmental issues. It is at these points where sectors converge that social innovation is believed to occur: "Indeed, much of the most creative action is happening at the boundaries between sectors" (Murray *et al.*, 2010: 3). To generate new and improved approaches and solutions to creating social value and social innovations, Phills *et al.* (2008) advocate the integration of private capital with public and philanthropic support, together with a free flow of knowledge exchange and sharing of resources at these sectoral intersections.

Nicholls and Murdock (2012) also argue that the complex and multifaceted global issues increasingly cause the boundaries to conventional sectors to dissolve. Westley and Antazde (2010) go beyond this, viewing social innovation as involving change at a system level. Therefore with respect to social innovation, the locus of innovation is not within the social enterprise, but within the social system that it inhabits. Consequently, it can be argued that social innovations arise as a result of interactions between different actors operating within the same social system and are developed through interactions and collective learning (Neumeier, 2012). However, there are studies that highlight the misalignment that exists within cross-sectoral partnerships, not only in terms of the cultural differences, but also in terms of the incongruence that exists between their missions and goals, expectations of the partnership and commitment to the relationship (e.g. Le Ber and Branzie, 2010). Following from studies that look at cross-sectoral partnerships (e.g. Le Ber and Branzie, 2010; Selsky and Parker, 2010, 2005), the notion of collective learning has emerged as a means of accessing the resources and capabilities required to address a social opportunity.

3.2.3 Co-operation and Collaboration

It is evident that in the existing literature, some studies of social innovation have begun developing an understanding of the attributes of social innovation or how social innovation is created. Furthermore, these scholars point towards the importance of collaboration, cross- or inter-firm learning, and particularly, capabilities. According to Ziegler (2010) social innovation is about the "carrying out of new combinations of capabilities" (*ibid*.: 256), which highlights the importance of fostering relationships that create social value,

social value that "benefits... the public as a whole – rather than private value" (Phills *et al.*, 2008: 39). Such a focus on relationships signifies the importance of co-operation and interactive learning throughout the process of social innovation, which is further reinforced by Edwards-Schachter *et al.* (2012), who perceive interactive learning as a driving force of social innovation.

In their studies of innovation, Coombs and Metcalfe (2002) propose the concept of 'crossfirm' capabilities. This may be pertinent when studying the process of social innovations which, based on the review of the literature, are reliant upon collective learning between a range of actors that transcend sectoral boundaries, giving rise to new combinations of capabilities, which result in social innovation. These innovations are very much dependent on the external conditions; i.e. the diversity of partners, the skills of workers, and volunteers, as well as the social needs of the multi-stakeholders. Phills *et al.* (2008) explain that social innovations have emerged as a result of this 'cross-fertilisation' or 'crosspollination' between the multi-stakeholders of diverse organisations and sectors. In a similar vein, Mulgan *et al.* (2007) state that many of the most successful innovators are those that have learned to operate across sectoral boundaries and that:

innovation thrives best when there are effective alliances between small organisations and entrepreneurs (the 'bees' who are mobile, fast, and crosspollinate) and big organisations (the 'trees' with roots, resilience and size) which can grow ideas to scale.

(*ibid*.: 5)

A recent study by Lyon (2012) contends for the need of inter-organisational relations for social enterprises, examining partnerships, collaborations, co-operation and relationships. Recognising that collaborative relations may play a part in successful social innovation, Lyon employs a multiple case study approach based on semi-structured interviews with social enterprises and private- and public- sector providers of services for unemployed people (*ibid.*). Lyon finds that the recognition of existing networks and relationships and their importance, in addition to the opportunity creation for group-work, is a key factor for social innovation. It is also highlighted that the inter-organisational relationships allow social enterprises to scale up their activities to increase their impact (*ibid.*). However, the author notes that whilst much of the literature demonstrates the importance and benefits of collaboration, the reasons as to why it occurs, where it occurs, its constraints and the processes by which social enterprises form collaborations are overlooked (*ibid.*).

In earlier work, Dees *et al.* (2004), suggest in relation to social entrepreneurs that scaling social innovation and its impact through existing organisations can be economical and effective. They propose that social entrepreneurs take into consideration the five 'R's':

READINESS Is the innovation ready to be spread? **RECEPTIVITY** Will the innovation be well-received in target communities? **RESOURCES** What resources, financial or otherwise, are required to get the job done right? **RISK** What's the chance the innovation will be implemented incorrectly, or will fail to have impact? **RETURNS** What is the bottom line? Impact should not just be about serving more people – it should be about serving them well.

(*ibid*.: 30, emphases original)

Dees *et al.* (2004) encourage assessing the adequacy of existing 'resources' the organisation has and what new resources are required before attempting to scale up. Likewise, Westley *et al.* (2014) highlight that organisations tend to realise that new resources and a set of complex skills, including resource mobilisation skills, are needed for scaling up their activities for greater impact.

Phills et al. (2008) elaborate that over the past 30 years, organisations across the three sectors of non-profits, government and businesses have eroded the boundaries to address the complexity of global social problems (e.g. climate change and poverty). As aforementioned, it is this erosion of walls that assists social innovation by means of three critical mechanisms (ibid.: 40): "exchanges of ideas and values, shifts in roles and relationships, and the integration of private capital with public and philanthropic support". Following this notion of eroding sectoral boundaries by Phills et al. (2008), Edwards-Schachter et al. (2012) promotes cross-sector fertilisation and system building for collaborations and exchanges across organisational and community boundaries. By cutting across these boundaries that traditionally separated the sectors, it allows for interactive learning and exchange of intangible forms of capital, which is argued to be as important as tangible forms of resources. Edwards-Schachter *et al.* believe that social innovation "is conceived as a process involving social interactions" (*ibid*.: 678) and user-driven processes of exchange and learning. Edwards-Schachter et al. suggest an environment of co-creation, collaboration, user-driven innovation and processes (*ibid.*) similar to that of 'open innovation' (Chesbrough, 2006, 2004; Chesbrough *et al.*, 2006). Despite the recent 'lively research' as Mulgan (2012) notes, the concepts of the dynamics of social innovation and the dynamics of co-operation and collaboration, which are suggestive of how some social

enterprises work or are successful, are "waiting to be taken further in relation to particular cases and testable hypotheses" (Mulgan, 2012: 62).

3.2.4 New Combinations: Resources and Capabilities

As aforementioned, there is very little in terms of empirical studies into social innovation, particularly those that study the harnessing of resources and capabilities for social innovation. A work by Meyskens *et al.* (2010) studies social ventures using the resource-based view perspective to explore the relationship between entrepreneurship and the creation of social value. The study analyses 70 social entrepreneurs using a resource-based lens and a mixed, qualitative and quantitative method approach. Statistically significant results provided evidence of relationships using statistical measures of partnerships, financial capital, innovativeness, organisational structure and knowledge transferability (*ibid.*). Additionally, evidence from these findings also show that, the internal operational processes in utilising these resource bundles and the relationship links between resources were not dissimilar to that of commercial enterprises (*ibid.*: 673).

Using empirical evidence as support, Meyskens *et al.* (2010) observe that the operational processes of social ventures utilises "new combinations" (Schumpeter, 1912/1934) of both explicit and tacit resources (Alvarez and Busenitz, 2001) to create value. Highlighting the use of new explicit and tacit resources combination in social enterprises, Meyskens *et al.* support the view that there are basically no significant dissimilarities between commercial and social enterprises in terms of their resource management. However it does not explain how resources are deployed to create these unique combinations, and what aspects of these new combinations enhance value creation. Moreover, Meyskens *et al.* (2010) identify significant relationships between aspects of social entrepreneurship such as partnerships, innovativeness, organisational structure and knowledge transferability, but fail to suggest specifically what these relationships create as an output or how they contribute towards the process of value creation other than some generic implications of each aspect.

3.2.5 The Role of External Relationships

A recent study by Chalmers and Balan-Vnuk (2013) examines how not-for-profit organisations in Australia and the UK pursue social innovation using an absorptive capacity lens. Absorptive capacity is the ability to recognise, incorporate and utilise valuable and new external knowledge (Cohen and Levinthal, 1990). Empirical evidence is gathered by means of 14 case studies. Chalmers and Balan-Vnuk (2013) find that not-forprofit organisations "exploit externally created knowledge and often rely on co-developing innovations with more technically proficient partners" (*ibid*.: 805). This aligns with the notion of open innovation and supports the argument for the importance of developing external links. Learning from and with partners, suppliers, customers, competitors and consultants is stressed as vital, as these ventures often cannot develop internal capabilities to sufficiently advanced levels due to the lack of funding or resources. Thus they argue that from collated evidence, organisations formalised their relationships with partners for the purpose of co-developing and delivering innovation, and that these were underpinned by "routines that encouraged the flow of knowledge between organisations" (*ibid*.: 802). Importantly, Chalmers and Balan-Vnuk state:

This is a double-edged sword: on the one hand, it creates a dependence on establishing and maintaining external relationships; yet on the other, it frees up the organisation to be more reactive to opportunities, as it is not locked into a particular knowledge source.

(*ibid*.: 802)

This signifies the importance of relationships, particularly for social organisations that are seen to be operating in one of the most dynamic sectors of the economy (Social Enterprise UK) but suffer from limited resources which constrains the internal development. Chalmers and Balan-Vnuk (2013) conclude that whilst the observed organisations are able to recognise the valuable knowledge external to the firm through developing absorptive capacity, resource limitations mean that the organisations will not necessarily be able to develop sufficient technical knowledge to execute innovation alone.

Another study by Chalmers (2013) explores the barriers faced by innovating organisations in the social economy. Here the author proposes for an 'open' paradigm to be embraced as the approach for innovation (Chalmers 2013, 2011), that is aligning with the works of Chesbrough (2006, 2004; Chesbrough *et al.*, 2006). Socially innovative organisations are encouraged to adapt both the firm's internal structures and their strategic search activities in order to fully exploit the external "valuable knowledge available through partnerships, competitors and the scientific research base" (Chalmers, 2013: 18). These socially innovative organisations and individuals embedded within the milieu of resource constraints often operate across the boundaries of sectors and in collaboration with diverse partners. Amongst other barriers to social innovation, Chalmers comments on an empirical

study on the process of social innovation by Lettice and Parekh (2010) that, social enterprises are "failing to identify and gain access to the networks that will facilitate their success" (Chalmers, 2013: 22). This not only affects the morale of the social innovator but also has a negative impact on the access to finance and supporting resources (Chalmers, 2013; Lettice and Parekh, 2010). It is suggested that perhaps the hybrid nature of social organisations may be an underlying reason as "sometimes innovators struggle to identify which conventional networks to align with, as social innovations often span boundaries and do not neatly fit into a single category" (Lettice and Parekh, 2010: 105).

It is apparent that a dominant theme running through the literature is that of the critical role relationships with external organisations play in maximising social innovations through accessing valuable knowledge available from networks of diverse sources external to the organisation. Through reviewing the literature, Chalmers observe that innovation can be improved by increasing the "variety and volume of knowledge sources" (Chalmers, 2013: 26). Consequently an open innovation approach is proposed to avoid narrow, 'myopic' sourcing of knowledge. For instance, an innovation process could be starved of new knowledge and capabilities as a result of bonds with other similar social innovators developed at the expense of more diverse or distributed groups or individuals (*ibid.*). Following the works of Laursen and Salter (2006) Chalmers notes:

organisations that widely search distributed knowledge sources and, more importantly, can successfully assimilate external knowledge into their own innovation process, are in a more advantageous position than their competitors. (Chalmers, 2013: 18)

3.3 Chapter Summary

It is evident from the review of the literature that research into social innovation is still in a nascent stage. Moreover it is one that cuts across fields of discipline, and areas of knowledge (Phillips *et al.*, 2015). The existing literature is predominantly concerned with defining this relatively new concept. There are many academic conceptualisations of social innovation that place an emphasis on the innovative approach of social entrepreneurship (e.g. Mair and Marti, 2006; Zahra *et al.*, 2009) suggesting social innovation as a phenomenon created by social entrepreneurship and social enterprises (e.g. Chalmers and Balan-Vnuk, 2013; Peredo and Mclean, 2006; Meyskens *et al.*, 2010). However very few studies have developed an in-depth understanding of managing the innovation process or

the capabilities involved (Chalmers and Balan-Vnuk, 2013). Shaw and de Bruin (2013) also highlight the need to divert away from addressing definitional research and recommends examining other facets of social enterprise and social innovation. For example these could be the interactions between social enterprises, social innovations and the environments in which these are embedded and the processes of social innovation. However, it is clear that there is research that has identified the importance of interaction and relationships, suggesting the importance of cross-sectoral (e.g. Phills *et al.*, 2008; Mulgan *et al.*, 2007) and inter-firm capabilities (e.g. Chalmers and Balan-Vnuk, 2013).

In conclusion, it can be seen that there are emerging key themes of research in the field of social innovation aside from studies concerned with defining the concept such as cross-sectoral interactions, cross- and inter-firm interactions. The use of capabilities frameworks to begin examining the process of social innovation is also emerging. Since innovation is reliant on co-creation and relationships with external actors (Coombs and Metcalfe, 2002) and because of limited resources within the social enterprise, these collective resources must be deployed efficiently and effectively. Bessant *et al.* (2012) highlight the extensive discussion on the central role of dynamic capabilities during the process of social innovation. Thus it is important to understand the capabilities that social enterprises have and implement to develop and create social innovation. Thus for the purpose of this research, the next chapter shall present a review of the literature discussing resources and capabilities, specifically, the resource-based view and dynamic capabilities approaches.

4 Dynamic Capabilities

4.1 Introduction

Social enterprises require a broad range of resources and capabilities that support them in their pursuit of social innovation within the complex changing environment in which they operate (e.g. Chalmers and Balan-Vnuk, 2013). Following the discussion of literature surrounding social innovation, this chapter will provide an overview of the existing literature starting with the resource-based view (RBV) and finishing with the dynamic capabilities approach. The RBV perspective views the firm as a bundle of resources, which contribute to the sustained competitive advantage of the organisation (Barney, 1991; Wernerfelt, 1984; Penrose, 1959). Attributes of such resources may include its value, rarity, inimitability, and unavailability of substitutes (Barney, 1991). Dynamic capabilities relate to "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" (Teece et al., 1997: 515) It is extended from the RBV framework, following recognition of the limitations of the RBV approach. In industries that are considered high velocity where the environment is dynamic and subject to turbulence (e.g. the telecoms sector) the RBV framework is considered too static and does not take into account changes in the external environment, the industry and its impact on the firm. From this 'inside-out' view, the dynamic capabilities framework emerged to account for the external environment effects on the organisation, therefore incorporating an 'outside-in' perspective (*ibid*.). Dynamic capabilities draws its name from the need to match or keep abreast of advances in turbulent environments, to match and continuously reconfigure internal capabilities to the dynamic external environment (Teece, 2007; Teece *et al.*, 1997). Furthermore, it has been highlighted that in the process of developing new products, services or processes, organisations should be wary that any core capabilities retained do not become core rigidities that inhibit development and prevent innovation (Leonard-Barton, 1992).

In order to understand the dynamic capabilities literature, previous works connected with RBV will be discussed. The definitions of these perspectives will be presented together with associated terminology. In aim to develop an enhanced understanding of this area of study, the chapter will acknowledge and critique key relevant articles, going on to identify links and research overlaps between the RBV, dynamic capabilities and innovation literature in a concluding synthesis at the end of the chapter.

4.2 **Resources and Capabilities**

As discussed in the previous chapter, social enterprises are often subject to a fluctuating supply of resources and so a focus on managing a shifting array of competences may be critical. Before further investigation into the literature surrounding the dynamic capabilities perspective, it is imperative that literature concerning the RBV, the foundations of the dynamic capabilities approach, is acknowledged. The origins of the RBV approach can be traced back to the works of Knight (1921) and Penrose (1959), which is then furthered by works of Barney (1991), Grant (1991) and many others. This area of study contains a plethora of literature and whilst it is impossible to acknowledge it completely, therefore for the purpose of this review, only key articles will be presented.

4.2.1 The Resource-Based View

RBV is an alternative to previous analytical tools, which primarily analysed how external conditions impact on firm performance e.g. industry structure, market positioning (Porter, 1985; 1980). RBV provides an internal perspective of how a firm's resources contribute towards a sustainable competitive advantage. The RBV logic explains how unique combinations or 'bundles' of resources and the subsequent deployment of these bundles contribute to the idiosyncrasies of a firm and thus potentially creating a competitive advantage., providing an 'inside-out' perspective.

Many of the keystones of the RBV originate from the work of Penrose (1959) where the notion of resource functionality was first founded, subsequently leading to developments towards the relationship between resources, competitive advantage and performance. Previously, Knight (1921) suggested that the manner in which a firm dealt with uncertainty was related to the way in which it organised its competencies and individual activities (Hodgson, 1993). Penrose (1959) led on from this earlier work of Knight (1921), investigating how the way the firm develops its knowledge base determined how it built on its production set. Like Knight, Penrose focused her attentions on the internal organisation of the firm and accepted that the firm was subject to differentiation with individuals organised into focused functional groups. In addition, Penrose highlighted the contribution of tacit knowledge and the un-transferrable nature of knowledge within the firm towards this process of differentiation.

Notably, Penrose (1959) argued for the unique utilisation and combination of resources that create opportunities, contending that it is not the resource that contributes to the process but the services rendered by these resources. A resource can be used in multiple ways and thus have different functions (*ibid.*). Moreover, a different service can be provided when the possible functions of a resource are combined with the possible functions of a nother. Therefore "resources consists of a bundle of potential services" (*ibid.*: 25) and thus provides organisation uniqueness through combinations of these resources.

In a slightly later work, one can find another suggestion of the approach that highlights that what a firm is capable of is dependent on the resources it can muster and not just the function of the opportunities it confronts (Teece *et al.*, 1997):

The capability of an organization is its demonstrated and potential ability to accomplish against the opposition of circumstance or competition, whatever it sets out to do. Every organization has actual and potential strengths and weaknesses; it is important to try to determine what they are and to distinguish one from the other. (Learned *et al.*, 1969: 179)

However, capabilities should not be confused with the more generic term 'competencies'. Competencies are a collective term for valuable capabilities that play a crucial strategic role in the firm (Hafeez *et al.*, 2002; Hamel, 1994; Barney, 1991; Grant 1991).

During the development of RBV, scholars have endeavoured to identify specific attributes of resources that have the potential to become sources of competitive advantage, especially sustained competitive advantage. Barney (1991) states that, with a theoretical model that allows for the assumption that resources may be heterogeneous and immobile, firm resources should have the following four attributes in order to hold the potential for sustained competitive advantage:

- (a) It must be valuable it exploits opportunities and/or neutralises threats in a firm's environment.
- (b) It must be rare among a firm's current and potential competition.
- (c) It must be imperfectly imitable.
- (d) And there cannot be strategically equivalent substitutes for this resource that are also valuable but neither rare nor imperfectly imitable.

(*ibid*.: 105-106)

These form the VRIN criteria, an acronym for resources that are: valuable, rare, inimitable and non-substitutable. The above attributes also serve as indicators of how heterogeneous and immobile these resources of potentially sustainable competitive advantage are. Learned *et al.* (1969) had also proposed that the ability to find or create "a competence that is truly distinctive" (*ibid.*: 181) critically affects the success or future of the organisation. If a resource has all the aforementioned attributes, it qualifies as a potential source of sustainable competitive advantage. Competitive advantage means a value creating strategy that is implemented by a firm that is not simultaneously implemented by any other competitor(s) (Barney, 1991: 102), be they current or potential competitors or future industry entrants (Barney *et al.*, 1989; Baumol *et al.*, 1982). Sustained competitive advantage that is inimitable by other firms who are unable to duplicate the benefits (Barney, 1991).

Kraaijenbrink (2009) acknowledges that any single resource can provide multiple productive opportunities, this is consistent with Penrose's view (1959):

There are many resources of which each unit is so much like every other unit that a homogeneous category can be established which includes a large number of units. This is true of many materials. With respect to other resources, however, each unit may be so unique that any classification, except one that makes each a separate resource, must disregard some heterogeneity; this is the case for human beings, land, and certain other types of resources.

(*ibid*.: 75)

Thus it is argued that the scarcity and heterogeneity of resources should be assessed not by the categories, but in terms of functionality (Kraaijenbrink, 2009):

Capabilities should be defined not in terms of resource types, but in terms of the functions that they serve. By categorizing resources in terms of functionality and use, managers can broaden their thinking not only about competitive opportunities, but about competitive threats as well.

(Peteraf and Bergen, 2003: 1028)

The above quote also highlights the possible risk of focussing too much on resource types and their combinations when using RBV and losing sight of the bigger picture of the unique functions and capabilities that these resources can provide.

Evidently there is much definitional discussion. An understanding of the key terms and concepts must be acquired to explore and review each of the analytical instruments. The following definitions are chosen for the purpose of this study, as definitions tend to vary throughout the literature. There are various definitions to the terms 'resource' and 'capability' and a clear grasp of the differences in the terms and related definitions should be addressed before introducing the dynamic capabilities perspective. The definition of

'resources' referred to in RBV and subsequent derivatives of the approach employed in this study includes: "all the assets, capabilities, organisational processes, firm attributes, technology, information and knowledge and so on, that are controlled by a firm enabling it to conceive and implement strategies in order to improve efficiency and effectiveness" (Daft, 1983).

However, as commented by Priem and Butler (2001a, b), much of the research using RBV adopts the definition from Barney (1991: 101 adapted from Daft, 1983), which does not clarify the difference between resources and capabilities: "firm resources include all the assets, capabilities, organizational processes, firm attributes, information, knowledge etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness". This kind of inclusiveness is also demonstrated by Wernerfelt:

By a resource is meant anything which could be thought of as a strength or weakness of a given firm. More formally, a firm's resources at a given time could be defined as those (tangible and in-tangible) assets which are tied semipermanently to the firm... Examples of resources are: brand names, in-house knowledge of technology, employment of skilled personnel, trade contracts, machinery, efficient procedures, capital, etc.

(Wernerfelt, 1984: 172).

Grant (1991) emphasises that intangible resources and people-based skills must not be overlooked, despite the difficulty in valuing assets and resources beyond tangible ones. In order to avoid a fragmented and incomplete representation of a firm's resources, Grant suggests a classification approach whereby six major categories provide a starting point for viewing resources: "financial resources, physical resources, human resources, technological resources, reputation and organizational resources" (Grant, 1991: 119). Knowledge resources can be viewed as being explicit or tacit (Zollo and Winter, 2002; Alvarez and Busenitz, 2001) whereby explicit or formal knowledge is codifiable, and tacit is accumulated by experience (Smith, 2001). It is argued that accumulation of tacit knowledge, so that it can be implemented explicitly rather than in a heuristic manner (Zollo and Winter, 2002). Additionally, aligning with Barney's (1991) theoretical model, it can be argued that tacit knowledge is a better source of competitive advantage than explicit knowledge as it fulfils each of the VRIN criteria.

The following table presents a chronological summary of selected key papers and research contributions, representing the development and 'life cycle' of RBV (Barney *et al.*, 2011). It must be noted that towards the maturity stage (as termed by Barney *et al.*, 2011) of RBV, it can be seen that the dynamic capabilities perspective was beginning to be developed as a derivative.

Author(s) and Date **Key Contribution Introduction Stage** Penrose (1959) Theorised how a firm's resources influence its growth; particularly the constraints inadequate resources have on a firm's growth. Lippman and Rumelt (1982) Explained the concepts of inimitability and causal ambiguity: concepts that subsequently have become core elements of RBV. Wernerfelt (1984) Emphasised the importance and value of focusing on firms' resources rather than their products: devised the term 'Resource-based View'. Barney (1986) Theorised how organisational culture is a possible source of sustained competitive advantage. Dierickx and Cool (1989) Developed the notion that resources are especially valuable when effective substitutes are not available. Barney (1991) Presented and developed core principles of RBV: detailed definition of resources, articulated the characteristics of a resource that is potentially a source of sustained competitive advantage (i.e. valuable, rare, inimitable and non-substitutable). **Growth Stage** Kogut and Zander (1992) Introduction of combinative capabilities concept and the importance of knowledge as a resource. Peteraf (1993) Outlined the conditions under which competitive advantage exists. Hart (1995) Introduced and developed natural-resource-based view (NRBV), a conceptual derivative from RBV. Grant (1996) Articulated another RBV derivative, the knowledge-based view. Conner and Prahalad (1996) Identified situations where application of opportunism-based arguments and knowledge-based logic may lead to opposite predictions with regards to the organisation of economic activity. Teece, Pisano and Shuen Built upon RBV, developed and introduced the dynamic capabilities (1997)concept. Explained competitive advantage as a result of the confluence of; assets, processes and evolutionary paths. Maturity Stage Explained the contributions of RBV to entrepreneurship research and Alvarez and Busenitz (2001)articulated possible further contributions. Priem and Butler (2001a, Debated the effectiveness of RBV as a strategic and organisation 2001b); Barney (2001) theory. Initiated discussion of the RBV micro-foundations by introduction of Lippman and Rumelt (2003) payments perspective. Winter (2003) Introduced and explained the 'higher order capabilities' concept. Gavetti (2005) Built theory about the micro-foundations of dynamic capabilities, emphasising the roles of cognition and hierarchy. Teece (2007) Specified the nature and micro-foundations of capabilities necessary to sustain superior enterprise performance in an open economy with rapid innovation, globally dispersed sources of invention, innovation, and manufacturing capability. Kraaijenbrink, Spender and Considered the merits of prominent critiques of RBV and the resource-Groen (2010) based theories. Leiblein (2011) Reviewed definitions, assumptions and propositions offered by literature streams of resource and capability based theories: RBV, strategic factor market and dynamic capabilities. Source: Adapted from Barney et al. (2011)

Table 4.1: The Life Cycle of Resource-Based View Logic: Selected Papers

Whilst the VRIN lens identifies which resources are valuable, rare, imperfectly imitable but cannot be replicated or substituted, it does not account for the dynamics in resource deployment, resource management and the impact of a dynamic environment on resource utilisation. As such the RBV approach is perceived as an 'inside-out' perspective that overlooks the external environment. This limitation is one of the main critiques prompting the move towards the 'dynamic capabilities' perspective, an approach that draws the internal and external influences together, and allows one to observe the resources of firms that create value and sustainable competitive advantage in conditions that are more dynamic and perhaps turbulent.

The RBV framework views firms as heterogeneous with respect to their resources and capabilities. However, many scholars have critiqued the resource-based perspective and contended that these resource bundles are 'sticky' (Teece *et al.*, 1997) and not all assets, such as intangible and tacit know-how, are readily exchangeable (Teece *et al.*, 1997). Teece *et al.* (1997) adds that even when assets are tradable or available for purchase, returns may not be beneficial. Successful organisations in the global marketplace are those that demonstrate "timely responsiveness and rapid and flexible product innovation, coupled with the management capability to effectively coordinate and redeploy internal and external competences" (*ibid.*: 515) thus illustrating the importance of considering the external environment. From these points, it is argued that RBV pays scant attention to the external dynamics of the organisation.

Leonard-Barton (1992) highlights the paradox that organisations face when managing the capabilities of an organisation; during the evolving process of managing capabilities, conflicting decisions are required relating to developing innovations and retaining core capabilities (*ibid.*). Whilst an organisation's core capabilities and routines may have proved successful in the past, they may be only partly appropriate for future projects and could risk becoming core rigidities hindering or preventing potential development for new projects (*ibid.*). Thus, these core capabilities both enhance and also inhibit future development and hence could cause rigidity of the organisation. This illustrates the difficulty in managing the flexibility of the organisation and its capabilities as it seeks to retain important capabilities for developing new products or innovations in 'swift-moving' environments (*ibid.*). The key to dynamic capabilities is identifying the *foundations* "upon

which distinctive and difficult-to-replicate advantages can be build, maintained, and enhanced" (Leonard-Barton, 1992: 516).

Terminology definition, especially the distinction between 'resources, capabilities and processes' lacks clarity in the RBV literature and its extended form, 'dynamic capabilities', adds more confusion to the terms associated with RBV. The term 'resource' differs from 'capability'. The following adapted definition for 'capability' is used for the purpose of this study: a capability is an organisational process that uses resources controlled by a firm; it is the capacity to deploy these resources (Barreto, 2010) and combinations of these embedded in organisational processes (Wang and Ahmed, 2007). The next presents the dynamic capabilities perspective, providing an overview of relevant key articles.

4.2.2 Dynamic Capabilities

The dynamic capabilities perspective (Teece, 2007; Gavetti, 2005; Winter, 2003; Zollo and Winter, 2002; Teece *et al.*, 1997) is an extended form of the Resource Based View (RBV) (Barney, 2001, 1991, 1986; Grant, 1996). Dynamic capabilities refer to the capacity of an organisation to deploy and utilise resources owned or controlled by the organisation (Barreto, 2010). Moreover, it is the capacity to deploy and utilise these resources with regards to a dynamic or changing environment (Teece et al., 1997), as opposed to merely just owning the resources and capabilities themselves. RBV is based upon the assumption that resources and capabilities are heterogeneously distributed across organisations and that such heterogeneity may be continuous over time and provide sustained competitive advantage for the duration that the resources remain valuable, rare, costly to imitate, and non-substitutable (Barney, 1991). Following speculation over the RBV approach being considered static, the initial dynamic capabilities framework (Teece and Pisano, 1994) evolved in the attempt to explain firms achieving competitive advantage in a constantly changing environment. Rather than simply viewing the firm as a set of individuals each with their own knowledge and skills, it also considers the manner in which these individuals are organised and re-organised in anticipation and/or response to their external environment (ibid.).

The dynamic capabilities perspective allows one to observe the resources of firms that create value and sustainable competitive advantage under dynamic and potentially

turbulent conditions. The dynamic capability logic is often associated with the manner and rate of deployment of the firm's resources and capabilities (Leiblein, 2011) in response to exogenous conditions and specifically, changes. Leiblein (2011) explains that the overall implication is that dynamic capabilities affect how organisations adapt to dynamic environments and create heterogeneous resource positions. According to Teece (1986), the firm can be seen to possess a set of firm-specific capabilities, which involve the strategic management of the firm's structures, routines, knowledge and skills in a manner that is to the firm's competitive advantage. The differential manner in which firms may manage their capabilities gives rise to firm resource heterogeneity, which in itself can lead to competitive advantage (Barney, 1991).

However, a capability must be highly distinctive (not easily replicated by competitors) if it is to be considered as a strategic competence. Such capabilities develop over time through the accumulation of knowledge, both tacit and codified. Yet, in today's ever-changing world a firm needs to be able to adapt rapidly to new constraints and demands; that is, it should act in a *dynamic* manner if it is to remain ahead of its rivals. The increasing velocities of current economies present more challenges than before when it comes to efficiency and effectiveness in management and strategy (Barreto, 2010), especially in the environments termed as 'hypercompetitive' (D'Aveni, 1994: 2). In such environments, fierce competition leads to unsustainable competitive advantage or the rapid decline and erosion in the sustainability of a firm's competitive advantage, which is especially evident in technological or high-velocity industries (Bourgeois and Eisenhardt, 1988). Failure to address the increasingly frequent, discrete shifts in these high velocity environments can negatively impact on the performance of a firm (Audia *et al.*, 2000).

Whilst RBV gives an internal perspective with regards to performance, the dynamic capabilities approach takes into consideration the external factors. A study by Wang and Ahmed (2007) discusses and identifies component factors of dynamic capabilities, which they define as:

A firm's behavioural orientation constantly to integrate, reconfigure, renew and recreate its resources and capabilities and, most importantly, upgrade and reconstruct its core capabilities in response to the changing environment to attain and sustain competitive advantage.

(*ibid*.: 35)

However, research into dynamic capabilities has been subjected to significant criticism over the vagueness and generalisation of the concept. Kraatz and Zajac (2001: 653) state, that "while the concept of dynamic capabilities is appealing, it is a rather vague and elusive one which has thus far proven largely resistant to observation and measurement". Winter (2003) adds that it is excessively connected to generic formulas for universal effectiveness. As a result of the on-going discussion, a large number of works exist, providing an array of definitions that attempt to study this concept in a more defined sense.

4.2.2.1 Defining 'dynamic capability'

An overview of notable works in this field is beneficial in order to understand the progress and achievements to date in clarifying the concept of dynamic capabilities, commencing with the fundamental definition of 'dynamic capabilities'. Teece *et al.* define capabilities as:

the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizational skills resources and functional competences to match the requirements of a changing environment whilst defining dynamic capability as the following: the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments.

(Teece et al., 1997: 515)

Teece (2007) later defines dynamic capabilities more extensively:

dynamic capabilities can be disaggregated into the capacity

- (a) to sense and shape opportunities and threats,
- (b) to seize opportunities, and
- (c) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets.

(*ibid*.: 1)

Similar to the indistinct use of terminology associated with resources and capabilities, the concept of capability and 'dynamic' capability is not clearly defined. Table 4.2 below presents a selection of the variations in 'dynamic capabilities' definitions in research studies spanning from 1994 to 2010:

Scholar(s) and Study	Definition			
Teece and Pisano	The subset of the competences and capabilities that allow the firm to create			
(1994)	new products and processes and respond to changing market circumstances.			
Teece, Pisano and	The firm's ability to integrate, build and reconfigure internal and external			
Shuen (1997)	competences to address rapidly changing environments.			
Eisenhardt and Martin	The firm's processes that use resources – specifically the processes to			
(2000)	integrate, reconfigure, gain and release resources - to match and even create			
	market change; dynamic capabilities thus are the organisational and strategic			
	routines by which firms achieve new resource configurations as markets			
	emerge, collide, split, evolve, and die.			
Teece (2000)	The ability to sense and then seize opportunities quickly and proficiently			
Zollo and Winter	A dynamic capability is a learned and stable pattern of collective activity			
(2002)	through which the organisation systematically generates and modifies its			
	operating routines in pursuit of improved effectiveness.			
Winter (2003)	Those [capabilities] that operate to extend, modify or create ordinary			
	capabilities.			
Zahra, Sapienza and	The abilities to reconfigure a firm's resources and routines in the manner			
Davidsson (2006)	envisioned and deemed appropriate by its principal decision maker(s).			
Helfat et al. (2007)	The capacity of an organisation to purposefully create, extend or modify its			
	resource base.			
Teece (2007)	Dynamic capabilities can be disaggregated into the capacity			
	(a) to sense and shape opportunities and threats,			
	(b) to seize opportunities, and			
	(c) to maintain competitiveness through enhancing, combining, protecting,			
	and, when necessary, reconfiguring the business enterprise's intangible and			
	tangible assets.			
Wang and Ahmed	A firm's behavioural orientation constantly to integrate, reconfigure, renew			
(2007)	and recreate its resources and capabilities and, most importantly, upgrade			
	and reconstruct its core capabilities in response to the changing environment			
	to attain and sustain competitive advantage.			
Barreto (2010)	The capacity of an organisation to deploy and utilise resources that are			
	owned or controlled by the organisation.			

|--|

Source: Adapted from Barreto (2010: 260) and modified with additional definitions

Eisenhardt and Martin (2000) suggest that dynamic capabilities are processes,

consequently creating yet again an unclear distinction between capabilities and processes

by defining dynamic capabilities as:

the firm's processes that use resources – specifically the processes to integrate, reconfigure, gain and release resources – to match and even create market change... the organizational and strategic routines by which firms achieve new resources and configurations as markets emerge, collide, split, evolve, and die.

(*ibid*.: 1107)

A study by Wang and Ahmed (2007) in which they also discuss and identify component

factors of dynamic capabilities, define dynamic capabilities as:

A firm's behavioural orientation constantly to integrate, reconfigure, renew and recreate its resources and capabilities and, most importantly, upgrade and reconstruct its core capabilities in response to the changing environment to attain and sustain competitive advantage.

(*ibid*.: 35)

By using this definition, Wang and Ahmed (2007) argue that dynamic capabilities are not processes but are embedded in processes (*ibid*.: 35), which furthers the stance taken by Teece.

On the other hand, Zollo and Winter (2002) state that dynamic capabilities are organised, structured, and persistent in an organisation. The issue of debate that Zollo and Winter (2002) put forward concerns whether the environment in which any given organisation operates in must be 'rapidly changing' in order for there to be an existence of dynamic capabilities. The authors contend that firms should aim to integrate, build and reconfigure their competencies and routines even in environments subjected to lower dynamics (*ibid.*). The definition by Zollo and Winter (2002) specifies that, an organisation's dynamic capability is developed through systematically generating and modifying a learned and stable pattern of collective activity in pursuit of improved effectiveness (*ibid.*). It is also a systematic and learned routine, indicating it is a structured, persistent process as opposed to exercising a disjointed, creative or 'ad hoc' procedure to a series of crises (*ibid.*). Therefore it can be said that whilst 'ad hoc' solutions or heuristics can be a competence of a company, it could not be a dynamic capability.

In addition to arguing for the unnecessary presence of 'a rapidly changing environment' as a requirement for the existence of dynamic capabilities, Zollo and Winter (2002) also believe that dynamic capabilities are not a necessity in environments where the dynamics are relatively static and stable. A single episode whereby the operating routines are upgraded may provide the organisation sufficient efficiency and in some cases, a competitive advantage (*ibid*.). In environments of relatively stable conditions, incremental improvements to an organisation's operating routine can be accomplished by "tacit accumulation of experience and sporadic acts of creativity" (*ibid*.: 341). In environments where change is both rapid and unpredictable, and also variable in direction, Zollo and Winter (2002) suggests that dynamic capabilities and superior learning approaches are required to be constantly updated else core competencies become hazardous core rigidities (Leonard-Barton, 1992). Leiblein (2011) illustrates the implications of the dynamic capability approach, and identifies that there are three main factors that combine to develop dynamic capabilities: resource allocation policies, organisation structure, and managerial cognition. Aligning with this, the researcher examines the dynamics within the social innovation process (model to be introduced in the next chapter) with this view underpinning the framework.

The dynamic capabilities framework as advocated by Teece (2007) illustrates three stages: sensing, seizing and managing threats/transforming. Combination of resources and capabilities and the purposes they serve at each stage is emphasised. Teece (2007) explains that access to information and the ability to recognise, sense and shape developments play a crucial part in creating or discovering opportunities. It is dependent on extant knowledge and capabilities or learning capabilities to scan and monitor internal and external developments while assessing customer or consumer needs. Furthermore, Teece adds that such searching activities for this 'sensing' phase must also "embrace potential collaborators – customers, suppliers, complementors – that are active in innovative activity" (*ibid*.: 1324). Although the study is directed at the technology industry and technological innovation, 'Open Innovation' is briefly highlighted by Teece (2007) to support his argument on the importance of external linkages and acquisition of technology, particularly linkages between corporations and universities to assist searches. However, it is stressed that searching externally for new opportunities alone does not suffice, and that it is the combining of complementary innovations that often creates the solution.

Subsequently, once new opportunities have been sensed by the organisation, there is the need to seize these new technological or market opportunities and execute upon them. Teece explains that in order to address and execute upon these newfound opportunities, businesses must make careful and strategic decisions on the manner in which to capture value (Teece, 2007: 1329). Target market segments and the mechanisms to capture value must be identified in order to determine a suitable business model to best meet the market needs as it is highlighted that the "capacity an enterprise has to create adjust, hone, and, if necessary, replace business models is foundational to dynamic capabilities" (*ibid*.: 1330). In striving to achieve this, Teece explains that outsourcing and procurement should be recognised as a possible means to compete as research or productive capabilities may lie external to the enterprise and this should not be overlooked. Teece discusses that the ability to procure (technology) whilst develop capabilities internally, are critical skills which should not be neglected and that, learning, upgrading and accumulating skills may require alliance arrangements (Teece, 2007; Branzei and Vertinsky, 2006). It is also highlighted by Teece *et al.* (1997) that external linkages play an important role in innovation as they have

a "bearing on the rate and direction of innovation, and how competences and capabilities co-evolve" (Teece *et al.*, 1997: 521). In the final stage of the process subsequent to the identification, and commitment to opportunities, it is stressed that reconfigurating and recombining assets is necessary to maintain evolutionary fitness as the enterprise grows and markets change. Gulati *et al.* (2000) adds that strategic alliances can become an inimitable and unique asset to the organisation, contributing to the sustained competitive advantage of the firm.

It is argued that it is not only the control over scarce or imitable resources that provides competitive advantage, leading to sustainability for the organisation, it is the acquisition of skill, knowledge and know-how and the management of such intangible assets that are critical (Teece *et al.*, 1997). Thus, organisational learning, skill and knowledge acquisition and accumulation become fundamentally strategic issues (*ibid.*). It is continuously stressed that external sources of resources should not be neglected and that 'increasingly, strategic advantage requires the integration of external activities and technologies" (*ibid.*) highlighting the importance of sourcing external to the organisation and by coordinating inter-organisational linkages and external integration (*ibid.*).

Teece *et al.* (1997) contend that competitive advantage lies with the managerial and organisational processes that manage the organisations resources and capabilities. The authors categorise organisation processes into three fundamental 'roles': coordination/integration (a static concept); learning (a dynamic concept); and reconfiguration (a transformational concept). Coordination and integration refers to how efficiently and effectively internal coordination or integration of activities is achieved (*ibid.*). Similarly, this applies to external coordination as it is increasingly recognised that strategic advantage is achieved by the "integration of external activities and technologies" (*ibid.*: 518). External integration and sourcing can be achieved through strategic alliances, technology collaborations and also the virtual corporation for example.

Learning is illustrated to be a social and collective process, involving organisation skills in addition to individual skills (Teece *et al.*, 1997). Teece *et al.* (1997) present the dynamic capabilities concept as process of coordinative management and thus promote interorganisational learning. Subsequently, the authors also highlight that existing research have identified the importance of collaborations and partnerships for organisational learning, which help firms to recognise "dysfunctional routines and preven[t] strategic blindspots" (Teece *et al.*, 1997: 520).

In order to adapt to the rapidly changing environment, the ability to sense and anticipate the need to reconfigure the asset structure of the organisation and make necessary internal and external transformations is critical (Teece *et al.*, 1997). Therefore constant monitoring of markets and developments in technologies is vital, as organisations are required to learn the capability to calibrate requirements for change and effectuate the appropriate and necessary adjustments and achieve reconfiguration ahead of competitors. Furthermore surveillance and scanning of the external environment, and the ability to evaluate the market and the firm's competitors is key (*ibid.*). The authors note that in dynamic environments, "narcissistic organisations" (*ibid.*: 520) are likely to be compromised.

Teece *et al.* (1997) contend that competences and capabilities fundamentally depend on the processes of the organisation, and can only provide competitive advantage if these routines, skills and complementary assets are inimitable for competitors (a notion inherited from the RBV perspective). Competitive advantage cannot be generated if a set of routines support a competence that is no longer valuable, easily replicated or emulated by competitors (*ibid.*). Replication is the transferring or redeploying of competences from one economic setting to another. By imitation, this means when competitors discover the organisational processes and routines, and directly copies these procedures. In other words, imitation is "replication performed by a competitor" (*ibid.*: 526). Emulation refers to the discovery of alternative methods that achieve the same functionality by competitors. However, since organisational processes are often tacit in nature and that tacit knowledge is often extremely difficult to transfer, replication is therefore often difficult (*ibid.*).

4.2.2.2 Organisational Learning

Extensive discussions around the 'dynamic capabilities' emphasise the role of organisation-level learning processes, especially in enabling the process of innovation (Bessant *et al.*, 2012), "[t]he ability to deliver a continuing stream of innovations to the market place, or to introduce a regular flow of process improvements depends on sustained search and experiment but also on the ability to extract and embed key behavioural routines which support innovation" (*ibid.*: 1087). The challenge for organisations is to

develop and facilitate the development of new capabilities to manage the process of innovation (Bessant *et al.*, 2012). It may be particularly important for social enterprises that are juggling and managing erratic resource flows and constraints as suggested in the literature (e.g. Chalmers, 2013; Mulgan, 2006), to develop links with its external environment in order to keep abreast of the latest developments, both socially and within the market, to support firm with utilising, configuring and building its capabilities.

This notion is also apparent in the innovation literature whereby coordination and combination of capabilities is key to the organisation's ability to compete in the market when technological changes occur. Teece et al. (1997) draws on the work of Henderson and Clark (1990) to support the argument that incumbent firms whose ability to reconfigure resources and capabilities are lacking, face difficulties in markets where there are technological changes, and even seemingly minor innovations can cause significant impacts. In the study by Henderson and Clark (1990) these difficulties are attributed "to the fact that systems-level or 'architectural' innovations often require new routines to integrate and coordinate engineering tasks" (Teece et al., 1997: 519). In a study of supply networks, Phillips et al. (2006) also highlight the need to engage in innovative approaches with a range of organisations to deal with innovation, specifically disruptive innovations. Therefore it is in the organisation's interest to continuously manage and utilise its resources accordingly by reconfiguration and not neglecting alternative sources where skills and other intangible resources may be procured by inter-organisational linkages. Moreover, this type of business model, where processes are coherent and systematic changes are continuously made, increases the difficulty of replication by other organisations. Thus, this increases the potential competitive advantage of the organisation. Partial replication or imitation of such a model could risk yielding zero benefits (Teece et al., 1997).

On the network-level, extant literature acknowledges that incumbent firms often need to leverage linkages in their external networks to source new technology and knowledge as networks can provide these resources that are not readily available through other exchanges (Rothaermel and Hess, 2007; Gulati *et al.*, 2000; Gulati, 1999). Rothaermel and Hess explain that "the locus of innovation lies within a network of learning composed of incumbent firms, new entrants, and research institutions, rather than within the boundaries of individual firms" (Rothaermel and Hess, 2007: 898) due to the complexity and rapid

expansion of knowledge bases. Thus, significant or revolutionary technological advances tend to be made exogenous to the organisation, as it has become impossible to keep abreast of developments internally through R&D within a single entity. However, Rothaermel and Hess (2007) highlight that prior empirical research indicates that for the organisation to recognise and value significant developments outside of existing competencies of the firm, sufficient internal research capability must be developed, in other words, capabilities at the firm-level (Cohen and Levinthal, 1990). Cohen and Levin terms this as absorptive capacity which is defined as:

[a firm's ability] to recognize the value of new, external information, assimilate it and apply it to commercial ends... to evaluate and utilize outside knowledge is largely a function of the level of prior knowledge.

(Cohen and Levinthal, 1990:128)

As such, it is suggested that a level of commonality between this internal research capability and the external research is necessary in order for knowledge transfer to be successful. Rothaermel and Hess (2007) note that alliances are dyadic exchanges in search for diverse sets of knowledge as studied by Gulati *et al.* (2000). Wang and Ahmed (2007) ellaborate that firms which demonstrate a stronger ability to learn from partners, integrating external information and transforming it into firm-embedded knowledge have a higher level of absorptive capability than firms who do not exhibit these skills. Woiceshyn and Daellenbach (2005) state that, absorptive capability is critical for success in order to lessen the risk of encountering significant difficulties in times of turbulence, especially when challenged by external technological change.

Following the review of dynamic capabilities, the definition of dynamic capabilities that will underpin this study and its conceptual framework will be that as advocated by the works of Teece and his colleagues (Teece, 2007; Teece, 2000; Teece *et al.*, 1997; Teece and Pisano, 1994): "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" (Teece *et al.*, 1997: 515). Teece (2007) stresses the significance of dynamic capabilities in comparison to prior frameworks. Teece argues that, the environment in which the dynamic capabilities framework recognises for the purpose of analysis is not that of the industry (*ibid.*). The dynamic capabilities framework examines the business 'ecosystem' (Teece, 2007). That is, the community of organisations that influence and impact the enterprise and its stakeholders. This therefore includes all institutions and individuals such as

"complementors, suppliers, regulatory authorities, standard-setting bodies, the judiciary, and educational and research institutions" (Teece, 2007: 1325).

Teece states that this framework recognises that "innovation and its supporting infrastructure have major impacts on competition" (Teece, 2007: 1325). The author believes this framework accounts for: a) the importance of and nature of innovation and other factors that change the 'rules of the game'; b) the factors inside the business enterprise that constrain choices; c) factors that impact imitation and appropriability issues; d) for the role of supporting institutions, complementary assets, co-specialisation, and network externalities or; e) the blurred nature of industry boundaries (adapted from Teece, 2007: 1325). From the above points, and the particular emphasis on the role of complementing and supporting institutions, it is clear that the framework is suitable considering the environment in which social enterprise operates and thus provides a suitable analytical tool.

Whilst existing research documents the positive influence of dynamic capabilities on financial, market and innovative performance, the role of dynamic capabilities and their influence or utilisation for social innovation has been less well-documented. Hence, this thesis aims to explore this further by studying the dynamic capabilities that foster social innovative opportunities and the subsequent social innovation(s).

4.3 Chapter Summary

This chapter has presented a discussion and demonstration of the evolution of the resourcebased view (e.g. Barney, 1991; Penrose, 1959) towards the dynamic capabilities perspective (Teece, 2007; Teece *et al.*, 1997). The dynamic capabilities framework provides a tool for analysis in that it is better suited for analysing organisations operating in turbulent or dynamic markets the organisation and accounts for the external environment. Following acknowledgement of key works in the resource-based view and dynamic capabilities literature, the next chapter seeks to synthesise the dynamic capabilities perspective with the process of social innovation by presenting a conceptual framework and model. Building on the review of the literature it is suggested that combinations of resources and capabilities are fundamental to an organisation's capacity to innovate (E.g. Bessant *et al.*, 2005; Bessant, 2003; Nelson and Winter, 1982, 1978 and 1977). Social enterprises are recognised as important social innovators (Dees and Anderson, 2006) but are constrained by resources (Chalmers, 2013). Therefore, the synthesis of innovation, social innovation and dynamic capabilities frameworks provides a means of investigation how social enterprises are capable of delivering social innovations despite such constraints. The next chapter presents a conceptual framework for the study of the process of social innovation (Chalmers and Balan-Vnuk, 2013), employing a dynamic capabilities perspective.

5 Towards a Conceptual Framework

5.1 Introduction

The prior literature review highlights that inter-organisational⁶, interactive learning and relationships play an essential role in supporting the process of social innovation (Bessant *et al.*, 2012; Edwards-Schachter *et al.*, 2012; McElroy, 2002), while external links and inter-organisation relationships can provide valuable resources for the development and reconfiguration of capabilities (Teece *et al.*, 1997) that are embedded in the innovation process. Building on both these literatures this chapter provides a synthesis of traditional innovation models with the dynamic capabilities perspective, presenting a conceptual framework and model for social innovation.

The conceptual model proposed by the researcher illustrates social innovation as a twostage process as conceptualised by Nicholls and Murdock (2012), integrating conventional models of managing the innovation process (Tidd and Bessant, 2009) and the dynamic capabilities framework (Helfat *et al.*, 2007; Teece, 2007). The resulting conceptual model, breaks social innovation down into in two stages: the first phase, 'seizing and selection' of socially innovative opportunities, and the second phase 'scaling and implementation' of these social opportunities. Within these two stages elements called relationship drivers depict the external linkages and relationships in assisting the development of internal capabilities of social enterprises that support and foster the process social innovation. Building on existing frameworks and theories, this chapter aims to present the process of developing the conceptual model. Finally, hypotheses are offered in order to test the conceptual model in the research.

5.2 Conceptual Framework

Building on the review of the literature, this study adopts the following definition of social innovation: the "innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly diffused through organisations whose primary purposes are social" (Mulgan, 2006: 146). The pursuit of a social goal is reliant upon a collective and dynamic interplay between actors working together to achieve social

⁶ Please note that in cases where the researcher is not citing or referring to existing literature, the researcher utilises the term 'inter-organisation' to include all organisational entities including enterprises, universities, institutions and other bodies within wider business environment.

objectives and outcomes (Dawson and Daniel, 2010), thus the notion of innovation can be seen as a social process, a result of social learning and networking (McElroy, 2002). The relationships supporting inter-organisational, interactive learning can be both formal and informal, such as through informal contacts or formalised collaborative projects, and support the flow of knowledge between organisations. Neumeier (2012) states that social innovations arise as a result of interactions between different actors operating within the same social system and are developed through interactions and collective learning. This mirrors traditional innovation, Bessant *et al.* (2012) argue for the importance of organisation learning, stressing the role of acquiring, and developing (or facilitating the development) of new capabilities to manage the process of innovation. Bessant *et al.* (2012) state that "[t]he ability to deliver a continuing stream of innovations to the market place, or to introduce a regular flow of process improvements depends on sustained search and experiment but also on the ability to extract and embed key behavioural routines which support innovation" (*ibid.*: 1087).

These interactions enable access to previously unreachable or unknown resources and the deployment of capabilities in an effective manner. As highlighted by Teece *et al.* (1997), external sources of knowledge, acquisition of skill and management of intangible resources can be critical in providing strategic advantage. Ziegler (2010) emphasises the importance of fostering relationships that create social value and that social innovation is about capabilities that are deployed in new combinations. In a stable environment organisations may rely on conventional market linkages (Dierkes *et al.*, 2003), however, in a volatile environment, such as that confronting the majority of social enterprises, an organisation may form multiple linkages to ensure they are able to respond quickly and effectively to changes in the external environment. Therefore, it is important to understand the nature of the linkages employed by a social enterprise to provide an insight into how social enterprises manage their capabilities in the pursuit of social innovation.

Nicholls and Murdock (2012) illustrate the pursuit of social innovation via a process of two distinct phases: the processes of invention (the generation of new ideas) followed by implementation (creation of successful practice). Subsequently these two stages translate as: turning resources into ideas and turning resources into practice, respectively (*ibid.*). Enabling the identification of new opportunities, models of traditional innovation emphasise the importance of developing linkages with the external environment (e.g.

Goffin and Mitchell, 2010; Wheelwright and Clark, 1992). Whilst many organisations may decide to develop their resources and capabilities in-house, in the case of social enterprises, where resources may be subject to fluctuation, external linkages may be instrumental in supporting scaling up and access to expertise. Building on this premise and through harnessing traditional models of innovation with a capabilities perspective, the conceptual framework looks at the role of relationships in the two stages of the social innovation process:

- 1. The seizing and selection of opportunities through external linkages, enabling social enterprises to match existing capabilities to external opportunities
- 2. The implementation phase whereby social enterprises try to build their capabilities through external linkages

The above two stages of the proposed social innovation process framework is in accordance with the works of Teece and his co-authors on developing, acquiring and utilising dynamic capabilities (Teece, 2007; Teece *et al.*, 1997). Teece (2007: 1341) states that an enterprise requires "sensing, seizing, and transformational/reconfiguring capabilities to be simultaneously developed and applied". The focus of this framework is upon external relationships with other organisations, which support the development of dynamic capabilities, enabling social enterprises to harness and exploit their capabilities in various contexts to adapt capabilities through exposure to new knowledge and skills. Aligning this with the notion that external linkages may provide critical resources and capabilities to the organisation for competitive advantage (Teece *et al.*, 1997), the researcher seeks to examine the linkages social enterprises develop in the pursuit of social innovation and the role of external relationships.

These highlighted concepts were chosen following the literature review as they advocated notions that most closely aligned to the conceptualised nature of social innovation, the social enterprise and the dynamic environment in which social enterprises operated. The researcher evaluated and selected frameworks that accounted for the following aspects: the process of social innovation and its stages; the dynamic environment surrounding the social enterprise; the external linkages in the 'ecosystem' within which the social enterprises operated; and the resources and capabilities these external linkages bring or help to develop.

In summary, the following table (Table 5.1) presents some of the main frameworks highlighted in the literature review chapters that contribute to each of the elements forming and underpinning the conceptual framework of the social innovation process. The table is not an exhaustive list of literature that was considered but selected examples that the researcher deemed most compatible for the conceptual framework:

Table 5.1: Conceptual Framework Elements

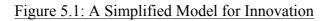
Conceptual Framework Notions				
	Definition of social innovation as advocated by Mulgan (2006), which			
Social Innovation Concept	encompasses all innovative activities and explicates the role of			
	organisations with a primary social mission.			
The Stages of Social	Nicholls and Murdock (2012) framework of social innovation process			
Innovation	conceptualised in two distinct stages.			
	Works that emphasise the importance of external linkages and			
	organisational interaction from the social innovation literature: Edwards-			
	Schachter et al. (2012); Lyon (2012); Neumeier (2012); Dawson and Daniel			
	(2010); Murray et al. (2010) Phills et al. (2008).			
The External Linkages,	Authors that emphasise the importance of external linkages from traditional			
Collaboration and Cross-	innovation literature: Bessant et al. (2012), Goffin and Mitchell (2010);			
Sector Interactions	Phillips <i>et al.</i> (2006); Coombs and Metcalfe (2002); Wheelwright and Clark			
	(1992).			
	Papers that highlight the need to leverage external linkages and networks to			
	acquire resources include: Rothaermel and Hess (2007); Gulati et al.			
	(2000); Teece et al. (1997).			
	Dynamic capabilities: Teece (2007); Teece et al. (1997). Additional to these			
	notable papers, the two distinct functions of dynamic capabilities as			
D	illustrated by Helfat et al. (2007) were taken into account.			
Resources and Dynamic				
Capabilities	The notion of needing new combinations of capabilities as suggested by			
	Zeigler (2010) and Henderson and Clark (1990) for example, were also			
	considered.			

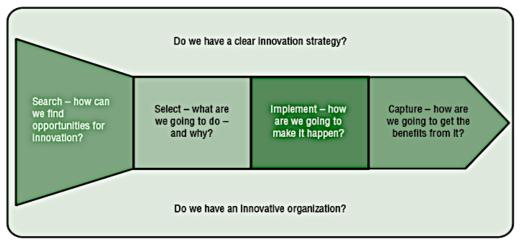
Building on existing models of innovation (Goffin and Mitchell, 2010; Tidd and Bessant, 2009), the ways that relationships with other organisations support the harnessing of dynamic capabilities (Helfat *et al.*, 2007; Teece, 2007) during the process of social innovation were identified and incorporated into the two stages of the conceptual model

which is presented later in the chapter in Figure 5.4. First, the development of the conceptual model is presented.

5.3 <u>Conceptual Model</u>

The conceptual model was generated with reference to frameworks and models from the innovation and dynamic capabilities literature. By combining elements of pertinent frameworks and overlaying the respective models, the conceptual model was created to illustrate the synthesis of these works and provide a new concept. The innovation models considered included the "simplified model for innovation" (Tidd and Bessant, 2009) (Figure 5.1) and the "model for innovation and entrepreneurship" (Bessant and Tidd, 2011). Additionally, the social innovation concept presented by Nicholls and Murdock (2012), was also employed as this model was significantly different, consisting of only two stages compared to the four- or five-staged models (Bessant and Tidd, 2011; Tidd and Bessant, 2009). In order to integrate the dynamic capabilities perspective models from the works of Teece (2007; Teece *et al.*, 1997) and Helfat *et al.*, (2007) were drawn upon.





Source: Tidd and Bessant (2009) used with permission of the publisher © John Wiley & Sons Ltd. 2009

The model by Tidd and Bessant (2009) is presented in four stages (Figure 5.1) – searching, selecting, implementing, and capturing innovative opportunities. Combining Tidd and Bessant's model, with the framework offered by Nicholls and Murdock (2012) resulted in a two-stage model of the process: whereby 'search' and 'select' was incorporated into the first phase – '*seizing and selection'*, and the remaining two stages of Tidd and Bessant's model, 'implement' and 'capture', formed the second phase – '*scaling and*

implementation'. Similarly, this also applies to the "model for innovation and entrepreneurship" (Bessant and Tidd, 2011), which is depicted in five stages.

Building upon this two-stage innovation concept, the next consideration was applying the dynamic capabilities perspective to the model. The principal dynamic capabilities model was that of Teece (2007), presented below in Figure 5.3. The model (*ibid.*) indicates three stages: 'sensing', 'seizing', 'managing threats/transforming'. The lower half of the diagram (Figure 5.2) indicates the various factors, the micro-foundations, which influence and input into each of the stages and contribute towards each individual dynamic capability that influences the business performance.

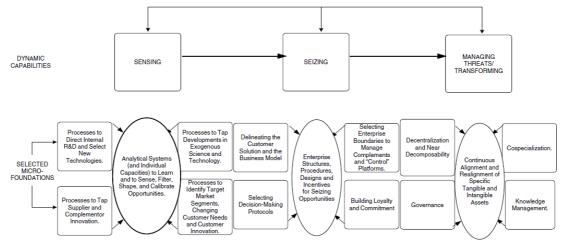


Figure 5.2: Foundations of Dynamic Capabilities and Business Performance

Source: Teece (2007) used with permission of the publisher

Meanwhile Helfat *et al.* (2007: 116) present a model relating to the *functions* of dynamic capabilities with two distinct categories: search and selection, and configuration and deployment. This two-stage model aligns well with the two stages of social innovation (Nicholls and Murdock, 2012), resulting in the merging of the 'sensing' and 'seizing' stage of Teece's (2007) model and the 'search and selection' of dynamic capabilities (Helfat *et al.*, 2007), to form the dynamic capabilities underpinning the 'seizing and selection stage' of the social innovation process. Similarly the 'managing threats/reconfiguration' (Teece, 2007) together with 'configuration and deployment' were combined, resulting in the second stage of the social innovation process 'scaling and implementation' (the term implementation originates from the Simplified Model for Innovation, see Figure. 5.1). The basic two-stage social innovation process model is shown in Figure 5.3.

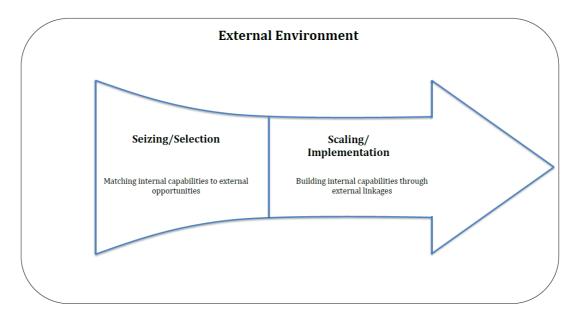


Figure 5.3: Basic Conceptual Model of the Social Innovation Process

This became the foundation to which elements coined 'relationship drivers' were added. These elements represent the purpose behind developing linkages with external organisations during the pursuit of social innovation, as a means of developing or acquiring the capabilities required for social innovation through the deployment of linkages with external organisations.

5.4 The Relationship Drivers

The conceptual model illustrates the process of social innovation within the context of this study – a social enterprise, recognising that external relationships play an influential role in the management of social innovation. This builds on a notion similar to that as advocated by Coombs and Metcalfe (2002) who highlight the reliance innovation has on co-creation and relationships with external actors. External relationships with access to new markets, communities or stakeholders enable the social enterprise to match existing capabilities to external opportunities. Moreover, social enterprises build or reconfigure existing capabilities through accessing new skills, developing new knowledge or building expertise via links with other actors, and once an opportunity has been identified this can be exploited and implemented. Seven relationship drivers were identified (see Table 5.1 below) and mapped in relation to the two stages of the conceptual model. This creates a visual representation of how relationships with an organisation enable a social enterprise to harness its dynamic capabilities to exploit opportunities and deliver social innovations.

		Drivers
Seizing/ Selection	1	to access new stakeholders
	2	to access new communities
	3	to access new markets
	4	to exploit new opportunities
Scaling/ Implementation	5	to build expertise
	6	to develop new knowledge
	7	to gain new skills

The relationship drivers presented in Table 5.1 were adapted from an innovation index project by NESTA (Roper *et al.*, 2009) together with those employed in the Community Innovation Survey 2006 (CIS6), which has evolved from the Oslo Manual (OECD, 2005) a conceptual manual that provides guidance on conducting innovation surveys.

These drivers of innovation (Table 5.1) involve developing external links to organisations and actors that support access to prospective new markets and stakeholders, access to new communities and exploitation of new opportunities, in other words, the first stage of the conceptual model 'seizing and selection'. The second stage 'scaling and implementation' on the other hand, illustrates the engagement of relationships with external organisations that support or contribution towards the development of knowledge, building of expertise, and the gaining of new skills.

The following two sections present the two stages of the social innovation process 'seizing and selection' and 'scaling and implementation' and each individual relationship driver in more detail. Each section provides justifications from existing literature to the assignment of the drivers to each stage; namely drivers that support the pursuit of innovative opportunities and those that enable the deployment and scaling up of innovative activities.

5.4.1 Stage One: Seizing and Selection of Opportunities

Based on the literature review, this research proposes that in this first stage, there are four drivers (Table 5.1) that organisations use to leverage existing capabilities to opportunities in the external environment. With reference to the conceptual model in Figure 5.4, the

linkages are presented by outward facing arrows illustrating the approaches to maximise social innovation opportunities by developing relationships with organisations that have access to new markets, stakeholders or communities, and support the social enterprise in exploiting opportunities. Thus, social enterprises are seeking to match their existing internal capabilities to the external social environment through engaging in building and exploiting these relationships.

Access new markets

The literature suggests that social enterprises often find it challenging to understand and access new markets (Chalmers, 2013). Social opportunities that arise may not always have a clearly defined customer or consumer base or a recognisable market demand. Through developing relationships, social enterprises may be able to gain access to new markets via organisations that perhaps have marketing functions to assist this, and so social enterprises can accurately target their audience and more effectively. Organisations such as professional or industrial associations and similar large organisations might have established marketing functions that may be able to provide support.

Access new stakeholders

Social enterprises may develop relationships with a diverse range of prospective key stakeholders as a means of accessing changes in the exogenous environment, for example changes in legislation or forthcoming social innovation opportunities. These external links could be organisations that have access to an array of information, from legal to commercial or industrial information. Stakeholders may include public agencies, major think tanks, universities and governmental institutions.

Access new communities

Existing literature suggests that to be successful, social enterprises need to build relationships that enable them to access new communities to ensure that the organisation develops social innovations that truly incorporate and address the needs of the target community (e.g. Edwards-Schachter *et al.*, 2012). Social enterprises may achieve this through building extensive linkages with a range of local support groups or community action groups.

Exploit opportunities

The review of prior literature highlights the importance of external linkages that support the pursuit of new opportunities for social enterprises undertaking social innovation. For instance, a relationship with an organisation that embodies similar values and objectives enables sharing of the risks involved in the pursuit of social innovation and delivering benefits to the community. These may include other similar enterprises, larger and established social enterprises, and private organisations operating in the same or similar sector.

5.4.2 Stage Two: Scaling and Implementation

In developing the model, this research proposes there are three drivers that relate to the second stage of the social innovation process. The inward flow of arrows (Figure 5.4) represents the building of capabilities with external partners. The importance of skill, knowledge and know-how (expertise) acquisition has been expressed as critical and highlighted in the dynamic capabilities literature (Teece *et al.*, 1997). Through engaging in building and exploiting relationships with external organisations that support or provide the access to new skills, developing new knowledge and/or building expertise enables the effective implementation of a socially innovative opportunity. Each of the three proposed drivers is outlined below.

Build expertise

It is suggested through existing literature that expertise in specific areas may be sought through utilising relationships with external links (e.g. Teece *et al.*, 1997), such as via secondments, mentoring schemes, internships, placements, work exchange programmes or even *pro bono* work from organisations that have the required experts. Through these links, existing expertise within the social enterprises can be built on and extended for more effective implementation of social innovations. This study will investigate whether such expertise will tend to be in areas more advanced and specific, that are geared towards particular projects or innovative activities.

Develop new knowledge

Relationships with organisations may expose the social enterprise to new knowledge bases. The literature review suggests that if a social enterprise collaborates with universities and research bodies, the dialogues could further extend the existing knowledge of the organisation and expose the organisation to previously unknown knowledge that may be significant for social innovation (e.g. Cameron, 2012; Teece, 2007; Biemans, 1992). It may provide justification as well as substantiation for the innovative activities the social enterprise is undertaking or seeking to implement. For instance, research institutions could gather both academic and commercial information, providing assessments and analyses before a socially innovative activity is pursued. Moreover, such research collaborations may be useful after a social innovation has deployed to assess impact and for developing its future agendas.

Gain new skills

Prior literature suggests that social enterprises may seek training and support from organisations or individuals that offer services to support the development of skills (e.g. Chalmers, 2013; Mulgan *et al.*, 2007), both technical and business related. Whilst much of the training may have been provided by the public sector via business support organisations, it may be the case that such training and skills development would be provided by the private sector and individuals, or industrial or professional associations. For business-orientated skills, relationships with generic organisations may be sought, whilst technical and specific skills may be developed with sector-related or area-specific bodies.

Referring to the conceptual model (Figure 5.4 below), each of the drivers is assigned arrows that face a specific direction illustrating the inward or outward flow of capabilities. Four drivers relate to Stage 1, whereby firms match existing capabilities to leverage opportunities in the external environment through accessing new markets, stakeholders or communities, and exploiting opportunities. Represented by outward facing arrows in Figure 5.4 the individual elements depict the linkages developed for the maximisation of social innovation opportunities through developing relationships and partnerships with others. Social enterprises engage in relationships in order to extend beyond traditional markets and sectors and support the development of dynamic capabilities that enable them to exploit their capabilities in different contexts or adapt capabilities through exposure to new knowledge and skills. Three drivers relate to Stage 2, representing the ability to access new skills, develop new knowledge or build expertise, and thus enabling the exploitation and implementation of an innovative opportunity. Stage 2 illustrates the development of capabilities for social innovation, hence the inward flow of arrows from the final three drivers in Figure 5.4. These two stages and the associated component drivers for the delivery of social innovation are illustrated below:

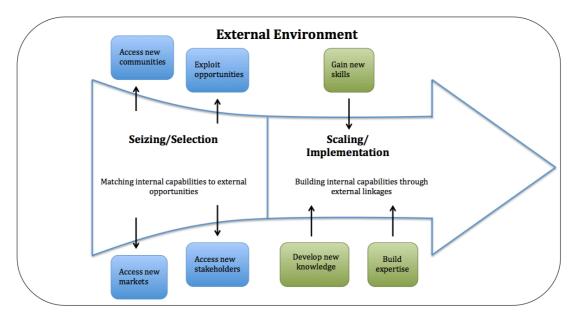


Figure 5.4: Conceptual Model of the Process of Social Innovation

5.5 <u>Hypotheses</u>

The literature presents a strong emphasis on the importance of relationships in pursuing both traditional innovation (e.g. Coombs and Metcalfe, 2002) and social innovation (Neumeier, 2012; Phills *et al.*, 2008; Mulgan *et al.*, 2007). Furthermore, external sources should not be overlooked when seeking to acquire resources or capabilities to enhance the competitive advantage of the organisation (Teece *et al.*, 1997). Therefore the study aims to examine the engagement in social innovation, and the roles of external linkages.

Building on the premise that social innovation occurs in two distinct stages, each of the drivers for engaging and developing relationships with external organisations should be linked distinctively to one of the two stages of social innovation. Thus the researcher argues that relationship drivers underpinning external linkages made by social enterprises fall distinctively under the respective stage of social innovation.

The researcher offers two hypotheses. Through the review of existing literature, it is suggested that due to the nature of social enterprises and their social mission, the social enterprises need to keep abreast of changes in the exogenous environment to seize socially

innovative opportunities. Highlighted in prior literature, social enterprises are subject to resource constraints, which suggest that they need support in accessing new stakeholders and markets, and also with exploiting these opportunities. Therefore, the researcher contends that:

H1: Relationships by social enterprises with other organisations build internal capabilities (seizing/selection) that are positively related to social innovation performance.

It is suggested through the literature that social enterprises are familiar with the societal needs, however, due to the resource constraints, social enterprises need the expertise and skills to scale up the activities to effectively address this. Following this notion, the researcher argues that scaling/implementation activities (Figure 5.1) should be positively related to a firm's perceived level of social innovation. Thus the second hypothesis is as follows:

H2: Relationships by social enterprises with other organisations build internal capabilities (scaling/implementation) that are positively related to social innovation performance.

In summary, should either of the above hypotheses be the case, it can subsequently be suggested that relationships with external linkages that develop dynamic capabilities in that particular phase are more influential to the social innovation process. If both of these hypotheses hold true, it would point to the idea that all of the distinct relationship drivers harnessing capabilities, which fall under the two stages of social innovation are developed by interactions with external organisations and positively influence the social innovation process.

5.6 Chapter Summary

This chapter presented the conceptual framework, the conceptual model of the relationships drivers necessary for social innovation and the hypotheses which the research tests. Four drivers relate to Stage 1 'seizing and selection', whereby social enterprises match existing capabilities to opportunities in the external environment. Meanwhile Stage 2 'scaling and implementation' is represented by external inputs of knowledge, expertise and skills into the organisation to reconfigure and develop capabilities in the social

enterprise. The following chapter presents the research context along with the philosophical and methodological underpinnings of the thesis.

6 Research Methodology

6.1 Introduction

The methodological approach underpinning the empirical enquiry will be explained in this chapter, having identified and established the niche in the existing literature for further research in the preceding chapters. This chapter commences by examining the research philosophy, exploring the explicit ontological and epistemological assumptions in the chosen research paradigm of positivist realism (Wass and Wells, 1994) and the related methodological approach adopted in this research. Following this, the penultimate section includes an extensive overview of the mixed methods strategy employed and the justification for techniques used in the empirical inquiry to investigate social innovation in the social enterprise phenomenon. Finally, a summary of the chapter is presented.

6.2 Research Philosophy

To establish knowledge about the social world a research strategy which sets out a logic of enquiry must be formed that embodies "particular combinations of ontological and epistemological assumptions, which provide a view of social reality and ideas on how knowledge can be generated" (Blaikie, 2010: 6). After considering the ontological and epistemological assumptions underpinning the research, an appropriate research methodology can be developed (Wass and Wells, 1994).

Ontology

Derived from the Greek word for 'being', ontology concerns itself with existence and the notion of 'reality'. On the two extremes of the ontological spectrum are 'realism' and 'idealism' (Crotty, 2011). Realism is a philosophical stance whereby the belief is that reality, or the existence of objects and the universe, exists in its abstract form outside of one's mind (*ibid*.) and independent of one's concept. However, there is much debate as to what exactly is meant by the term 'realism'. Trigg (1980: vii) identifies a key aspect of realism as a "notion of objectivity – things being the case whether people recognize them or not". Such definitions indeed describe what one may call 'absolute reality'.

Kwan and Tsang (2001) indicate that there are different kinds of realism and it is crucial that one distinguishes 'dogmatic' absolute realism from critical realism. The authors

highlight that both forms of realism believe that theories can be either true or false and that "rigorous scientific research can move us progressively towards a true account of phenomena" (Kwan and Tsang, 2001: 1165). Additional to this, absolute or dogmatic realists adopt an attitude similar to that of a primitive form of positivism, that infallible scientific methods can lead to universal laws (*ibid*.). This is the belief that "current theories correspond (almost) exactly to reality" (*ibid*.: 1165) and that there is little room for critical scrutiny or errors. Conversely, whilst critical realists also believe in progressing towards the 'truth', critical realists further believe that our theories, observations and methods to examine phenomena are fallible, as reality exists independently of our minds. Thus it is argued that "verification and falsification are never conclusive, especially in social sciences" (*ibid*.: 1165) and so it is imperative to continuously and critically test theories and alleged universal laws.

In contrast to realism, idealism is constituted by the belief that reality is subject to individual interpretation. Immanual Kant defines (material) idealism to be "the theory which declares the existence of objects in space without us to be either (1) doubtful and indemonstrable, or (2) false and impossible" (Kant, 1781/1972: 170). This theory states that one does not have knowledge of objects as objects in themselves and argues that one knows and can only know phenomena (*ibid*.). An extreme form of idealism is solipsism, where certainty exists only in one's mind, a view of idealism similar to what Kant further explicates in his work:

the *dogmatical* idealism of Berkeley...maintains that space, together with all the objects of which it is the inseparable condition, is a thing which is in itself impossible, and that consequently the objects in space are mere products of the imagination.

(*ibid*.: 170)

Constructionism or constructivism (Creswell, 2009) is a perspective that lies somewhere between the two extremities of realism and idealism in their absolute forms. It is an ontological position where one believes that the reality is constructed. Crotty (2011) identifies assumptions upon which (social) constructivism is based: subjective meanings are constructed by individuals as they engage with the world they are interpreting, which leads to varied and multiple views on which the research relies (Creswell, 2009). These individuals make sense of the world based on historical and social perspectives. Whilst there is a plethora of empirical literature in business and management research, few studies explicitly articulate the ontological position of the study (Johnson and Duberley, 2011; Laughlin, 1995; Morgan and Smircich, 1980), therefore we have to infer the ontological position by the epistemological stance.

Epistemology

What constitutes knowledge is termed 'epistemology' (Burrell and Morgan, 1979). On a traditional dichotomous framework, knowledge is taken to be either objectivist or subjectivist (Burrell and Morgan, 1979). The premise of the objectivist epistemology is that meaning exists independently of the consciousness and the situation (Crotty, 2011). Wass and Wells (1994) refer to this position as a positivist epistemological perspective. These are both based on a realist ontology whereby observation is independent of subjective interpretation,

On the other hand a subjectivist approach (sometimes known as interpretivism) would emphasise the impact of interpretation made by the researcher in the creation of this knowledge, and thus aligning with the idealist ontological position. Wass and Wells (1994) also use the term Naturalism as an epistemological perspective that is premised on idealist ontology, where the assumption is that reality does not exist outside the consciousness of the individual.

Wass and Wells (1994) try to reconcile these two extreme positions, marrying the positivist and interpretivist perspectives by acknowledging "the existence of an external reality, its subjective interpretation and the role of human agency in affecting the external social world" (*ibid.*: 16). However some academics argue that whilst this paradigmatic synthesis appears to combine strengths and limit the weaknesses of the original individual methodologies, it may be problematic when attempting to blend aspects that are too opposed to be combined (Wass and Wells, 1994; Burrell and Morgan, 1979).

Table 6.1 below summarises ontological and epistemological perspectives together with their respective assumptions that underpin those philosophical stances. The scientific objective outlines the aims of the research in the corresponding positions. The dashed outlines of the table indicate that there are a number of philosophical perspectives and

methodological paradigms on the continuum that fall between the two extremes of absolute realism and absolute idealism, absolute positivism and absolute subjectivism and so on. <u>Table 6.1: Framework of Philosophical Research Paradigms – Part 1</u>

Ontological	Realism 🗲		Idealism
Perspective			
Ontological Assumptions	Real world exists independently of subjective consciousness and cognition; enquiry can converge on reality	Real world exists independently of subjective consciousness but experience of the real world is through subjective consciousness	Idealist world does not exist outside consciousness of the individual, hence multiple conceptions of reality and enquiry cannot converge on a single reality
Epistemological	Positivism/		Naturalism/
Perspective	Objectivism 🗲 🗕	 	Subjectivism
Epistemological Assumptions	Only that which is objectively observable is valid knowledge. Observer is independent of what is being observed. Subjective consciousness is meaningless	Knowledge includes the observable and the intangible. General laws are not deterministic, they only partially explain human action; equally subjective interpretations are partially explained by the external world	Valid knowledge comprises individual comprehension of the 'external' world. Explanation comprises causal laws inferred from actors' subjective perceptions of their social world; definition of knowledge is determined by the researcher, generalisation beyond idiosyncratic context is meaningless
Scientific Objective	Nomothetic with natural science; abstract from subjective idiosyncrasies to identify causal laws inferred from empirical regularities. Focus on replicability and internal/external validity	Inclusion of subjectivity in traditional model of science to uncover general laws and how these are interpreted by subjects; laws are tendencies.	To identify and explain individual conceptualisation and interpretation of external factors: internal validity, ecological validity. To uncover internal logics

Sources: Adapted from Crotty, 2011; Johnson and Duberley, 2011; Wass and Wells, 1994; Burrell and Morgan, 1979.

The ontological and epistemological perspective one chooses to adopt for the research has implications for the way in which research design and research methods are to be developed and deployed. The table below (Table 6.2) gives an overview of the methodologies typically associated with each of the corresponding philosophical paradigms.

Epistemological	Positivism/	1	Naturalism/
Perspective	Objectivism 🗲		
Enquiry	Deductive: abstract	'Retroductive': iterative	Inductive: theory grounded
Approaches	theories, operational hypotheses, observations, inference using statistical tests 'predictive'	cycle observation, theory	in empirical world observation, reflection, construction of abstract concepts 'descriptive' explanations
Methodology	Nomothetic. Experimental research. Applying protocols from the natural sciences	Methodological pluralism, triangulation, interactive, participatory, action research; method determined by subject of research	Ideographic. Ethnographic; grounded theory; heuristic approaches. Techniques that access cultures and social groups/communities
Methods	Quantitative, systematic and precise; directly observable and measurable. Use of statistical controls	Quantitative and qualitative; complete tool kit of techniques often in context of a case study. Methods combined with a view to compensate for weaknesses in a single method	Qualitative, intangible. Participant observation, unstructured interviews, textual analysis.

Table 6.2: Framework of Philosophical Research Paradigms - Part 2

Source: Adapted from Crotty, 2011; Johnson and Duberley, 2011; Wass and Wells, 1994; Burrell and Morgan, 1979.

The two columns on the end of the spectrum indicate positivism/objectivism and naturalism/subjectivism respectively. The column situated in the middle represents a plethora of different epistemological positions as advocated by various academics. For instance, Wass and Wells (1994) refer to this area as a realist epistemology, while Miller and Tsang (2010) specify that 'retroductive' approaches are methods used in a critical realist epistemology. Nevertheless, it is clear that the epistemological perspective determines the overall research methodology and entailed associated methods.

6.3 <u>Research Paradigm for the Thesis</u>

The assumptions underpinning this research are first, there is a degree of subjective interpretation of the real world which exists independently and prior to subjective comprehension by the researcher, and that the impact of the researcher's subjective interpretation is recognised and thus, causal laws are not deterministic of action but rather influential 'tendencies' (Wass and Wells, 1994). For these reasons, this research will adopt the ontological assumptions of realism along with a positivist epistemological paradigm, thus a positivist realist position. Objectivity remains the main underpinning of the positivist realist approach. Subsequently, to maintain a positivist perspective, the influence of the researcher should remain minimal to decrease the risk of influencing the research.

On the other hand, in a naturalist realist approach subjective opinion would have a higher influence.

It must also be noted that there are limitations to a pure positivist approach in the field of social sciences. Wass and Wells (1994) explicate two main factors that make social phenomena difficult or not amenable to a scientific approach. The first concern is when studying social behaviour for which the natural occurrence of the phenomena lies in a social environment; if it is observed in a laboratory setting, the artificial setting will distort behaviours and thus lack ecological validity (*ibid*.). The second concern is the methods of inquiry; in the situation where an experiment is unsuitable, undesirable or entirely impossible for studying phenomena, alternative methods such as surveys may be used. However such techniques may "introduce additional sources of bias including non-response and response error" (*ibid*.: 12).

The researcher believes there must be scientific rigour underpinning this project as in line with positivism, however considering the limitations of a pure positivism approach, it was decided that the philosophical approach influencing this study borders on the realist epistemology as advocated by Wass and Wells (1994: 16). Such a view reconciles the extreme epistemological positions and offsets their limitations. Further, it suggests the need for a mix of research methods (Table 6.2).

In conclusion, having acknowledged and considered the assumptions of the positivist realist paradigm and its differences against other relevant possibilities, a strategy of specific techniques for inquiry must be created accordingly. The following section introduces the mixed methods approach and outlines the strengths and weaknesses of quantitative and qualitative research. Subsequently, a rationale for utilising mixed methods is presented.

6.4 Mixed Methods Research

The empirical enquiry for this research project will be undertaken using a mixed methods approach. Mixed methods research can be defined as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts, or language into a single study" (Johnson and Owuegbuzie, 2004:

17). Ivankova *et al.* (2006) further elaborates that this procedure of collecting, analysing and mixing or integrating both forms of data assists in gaining a better understanding of the research problem (Tashakkori and Teddlie, 2003; Creswell, 2005). However it must be noted that, as Yin (2006) states, the term "mixed methods" embraces much more than just the traditional dichotomy of qualitative and quantitative, and includes mixing specific techniques within those (*ibid.*: 41). Stemming from this, Johnson *et al.* (2007) provide a synopsis of the definitions of mixed methods research, three major contributions of which are shown in Table 6.3.

Udo Kelle (Johnson et al., 2007: 120)Mixed methods means the combination of different qualitative and quantitative methods of data collection and data analysis in one empirical research project. This combination can serve for two different purposes: it can help to discover and to handle threats for validity arising from the use of qualitative or quantitative research by applying methods from the alternative methodological tradition and can thus ensure good scientific practice by enhancing the validity of methods and research findings. Or it can be used to gain a fuller picture and deeper understanding of the investigated phenomenon by relating complementary findings to each other which result from the use of methods from the different methodological traditions of qualitative and quantitative research.Janice Morse (Johnson <i>et al.,</i> 2007: 120)A mixed method design is a plan for a scientifically rigorous research process comprised of a qualitative or quantitative <i>core component</i> that directs the theoretical component(c). These components	Huey Chen (Johnson <i>et al.,</i> 2007: 119)	Mixed methods research is a systematic integration of quantitative and qualitative methods in a single study for purposes of obtaining a fuller picture and deeper understanding of a phenomenon. Mixed methods can be integrated in such a way that qualitative and quantitative methods retain their original structures and procedures (pure form mixed methods). Alternatively, these two methods can be adapted, altered, or synthesized to fit the research and cost situations of the study (modified form mixed methods).
 2007: 120) combination can serve for two different purposes: it can help to discover and to handle threats for validity arising from the use of qualitative or quantitative research by applying methods from the alternative methodological tradition and can thus ensure good scientific practice by enhancing the validity of methods and research findings. Or it can be used to gain a fuller picture and deeper understanding of the investigated phenomenon by relating complementary findings to each other which result from the use of methods from the different methodological traditions of qualitative and quantitative research. Janice Morse (Johnson <i>et al.</i>, 		1 1
threats for validity arising from the use of qualitative or quantitative research by applying methods from the alternative methodological tradition and can thus ensure good scientific practice by enhancing the validity of methods and research findings. Or it can be used to gain a fuller picture and deeper understanding of the investigated phenomenon by relating complementary findings to each other which result from the use of methods from the different methodological traditions of qualitative and quantitative research.Janice Morse (Johnson et al.,A mixed method design is a plan for a scientifically rigorous research process comprised of a qualitative or quantitative core component that directs the theoretical		5 1 1 5
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(Johnson <i>et al.</i> , comprised of a qualitative or quantitative <i>core component</i> that directs the theoretical		
2007: 120) drive with qualitative or quantitative supplementary component(s). These components	(Johnson et al.,	· · · ·
	2007: 120)	drive, with qualitative or quantitative supplementary component(s). These components
of the research fit together to enhance description, understanding and can be conducted		of the research fit together to enhance description, understanding and can be conducted
simultaneously or sequentially.		simultaneously or sequentially.

Table 6.3: Definitions of Mixed Methods

Source: Johnson et al. (2007: 119-120)

The main rationale behind a mixed methods approach is that it can simultaneously broaden and strength the research (Yin, 2006), because, as Ivankova *et al.* (2006) points out, the justification for mixed methods lies with the insufficiency of quantitative or qualitative methods when used individually. It is stressed that in order to maintain the integrity of the research, this approach is to be applied within the confines of a single project, as opposed to synthesis of several parallel studies decomposed from the project (Yin, 2006; Johnson and Owuegbuzie, 2004). By triangulating methods of inquiry "the bias inherent in any particular data source, investigators, and particularly method will be cancelled out when used in conjunction with other data sources, investigators and methods" (Denzin, 1978: 14). As opposed to using mono-methods, mixed methods utilise the strengths of each method to inform the other part of the research: the inclusion of qualitative data can explain emerging relationships in the quantitative data, meanwhile the inclusion of quantitative data compensates for the inability to generalise qualitative data (Johnson and Onwuegbuzie, 2004; Onwuegbuzie and Leech, 2004). Greene *et al.* (1989) summarise five rationales for mixed method studies as:

- a) **Triangulation** seeking convergence and corroboration of results from different methods studying the same phenomenon. Increasing validity of constructs and inquiry results by counteracting or maximising heterogeneity of irrelevant sources of variance attributable especially to inherent method or inquirer, or bias of substantive theory or context.
- b) Complementarity seeking elaboration, enhancement, illustration, and clarification of results from one with results from another method. Increasing interpretability, meaningfulness, and validity of constructs by capitalising on inherent method strengths and counteracting inherent biases.
- c) **Development** using results from one method to inform another. Increasing validity of constructs by capitalising on inherent method strengths.
- d) Initiation discovering paradoxes and contradictions that lead to a reframing of the research question. Increasing breadth and depth of inquiry results by analysing from different perspectives.
- e) **Expansion** seeking to expand the breadth and range of inquiry by using different methods for different inquiry components. Increasing scope of inquiry by selecting methods most appropriate for multi inquiry components.

The researcher must gain an understanding of the advantages and disadvantages of quantitative and qualitative approaches in order to create a combination where the methods are complementary and to avoid overlapping weaknesses (Johnson and Owuegbuzie, 2004; Johnson and Turner, 2003). Tables 6.4 and 6.5 below seek to present a comprehensive overview of possible strengths and weaknesses in utilising only quantitative or qualitative research methods.

Quantitative Research		
Strength	Weaknesses	
Testing and validating constructed theories about	The researcher's categories and theories may not	
how (and to a lesser degree, why) phenomena occur	reflect local constituencies' understandings	
Testing hypotheses that are constructed before the	The researcher may miss out on phenomena	
data are collected. Can generalise research	occurring because of the focus on theory or	
findings when the data are based on random	hypothesis testing rather than on theory or	
samples of sufficient size	hypothesis generation (called confirmation bias)	
Can generalise a research finding when it was	Knowledge produced may be too abstract and	
been replicated on many different populations and	general for direct application to specific local	
subpopulations. Useful for studying large	situations, contexts and individuals	
numbers of people		
Useful for obtaining data that allow quantitative	The analysis of relationships between variables	
predictions to be made	creates a static view of social life independent of people	
May eliminate the confounding influence of many	people	
variables, allowing one to more credibly assess		
cause-and-effect relationships		
Data collection using some quantitative methods		
is relatively quick and the data analysis is		
relatively less time consuming (using statistical		
software). Provides precise, quantitative,		
numerical data		
The research results are relatively independent of		
the researcher (e.g., effect size, statistical		
significance)		
It may have higher credibility with many people		
in power (e.g., administrators, politician, funders)		

Table 6.4: Strength and Weaknesses of Quantitative Research

Source: Adapted from Bryman, 2012; Johnson and Onwuegbuzie, 2004

As stated above, traditional quantitative research emphasises the focus on deduction, confirmation, theory or hypothesis testing, explanation, prediction, standardised data collection and statistical analysis (Johnson and Onwuegbuzie, 2004). Traditional qualitative research, on the other hand, centres on induction, discovery, exploration, theory or hypothesis generation, and qualitative analysis (*ibid*.). Table 6.5 summarises the main arguments in favour and against qualitative research.

Qualitative Research		
Strengths	Weaknesses	
The data are based on the participants' own categories of meaning	Knowledge produced may not be generalisable to other people or other settings (findings may be unique to the relatively few people included in the research study)	
It is useful for studying a limited number of cases in depth and for describing complex phenomena Provides individual case information. Provides	It is difficult to make quantitative predictions and to test hypothesis and theories It may have lower credibility with some	
understanding and description of people's personal experiences of phenomena (emic) Can conduct cross-case comparisons and analysis.	administrators and commissioners of programs It generally takes more time to collect the data	
Can describe, in rich detail, phenomena as they are situated and embedded in local contexts	when compared to quantitative research and the data analysis is often time consuming	
Can study dynamic processes (documenting sequential patterns and change)	The results are more easily influenced by the researcher's personal biases and idiosyncrasies	
Identifies contextual and setting factors as they relate to the phenomenon of interest. Can use the primarily qualitative method of	Researcher's presence may bias responses May require the researcher to seek information	
"grounded theory" to generate inductively a tentative but explanatory theory about a phenomenon	from hard-to-find places or sources	
Can determine how participants interpret "constructs" (self-esteem, IQ). Determine idiographic causation		
Data are usually collected in naturalistic settings in qualitative research. Qualitative approaches are responsive to local situations, conditions, and stakeholders' needs		
Qualitative researchers are responsive to changes that occur during the conduct of a study (especially during extended fieldwork) and may shift the focus of their studies as a result		
Qualitative data in the words and categories of participants lend themselves to exploring how and why phenomena occur		
Can use an important case to demonstrate vividly a phenomenon to the readers of a report.		

|--|

Source: Adapted from Creswell, 2009; Johnson and Onwuegbuzie, 2004

In contrast to the limitations of quantitative and qualitative methods listed above, the results of a mixed methods approach "will be a convergence upon the truth about some social phenomenon" (Denzin, 1978: 14). The triangulation of methods seeks to increase the validity and strength of the results by combining strengths and minimising weaknesses of other methods alone:

Once a proposition has been confirmed by two or more independent measurement processes, the uncertainty of its interpretation is greatly reduced. The most persuasive evidence comes through a triangulation of measurement processes. If a proposition can survive the onslaught of a series of imperfect measures, with all their irrelevant error, confidence should be placed in it. Of course, this confidence is increased by minimizing error in each instrument and by a reasonable belief in the different and divergent effects of the sources of error.

(Webb et al., 1966: 3)

Following this, Table 6.6 below highlights the characteristics of the mixed methods approach:

Mixed Method Research	
Strengths	Weaknesses
Words, pictures, and narrative can be used to add meaning to numbers. Numbers can be used to add precision to words, pictures, and narrative. Thus, can provide quantitative and qualitative research strengths Can generate and test a grounded theory	Can be difficult for a single researcher to carry out both qualitative and quantitative research, especially if two or more approaches are expected to be used concurrently; it may require a research team Researcher has to learn about multiple methods and approaches and understand how to mix them appropriately
Can answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach Can be used to increase the generalisability of the results	Methodological purists contend that one should always work within either a qualitative or a quantitative paradigm More expensive and time consuming
Can use the strengths of an additional method to overcome the weaknesses in another method by using both in a research study	Some of the details of mixed research remain to be worked out fully by research methodologists (problems of paradigm mixing, how to qualitatively analyse quantitative data, how to interpret conflicting results)
Can provide stronger evidence for a conclusion though convergence and corroboration of findings and add insights and understanding that might be missed when only a single method is used Qualitative and quantitative research used together produce more complete knowledge necessary to inform theory and practice	

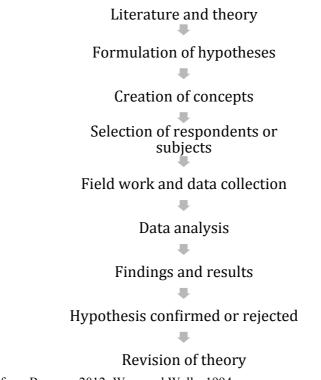
Table 6.6: Strengths and Weaknesses of Mixed Methods Research

Source: Adapted from Johnson and Onwuegbuzie (2004)

6.5 The Strategy for Empirical Inquiry

In line with the chosen positivist realist paradigm underpinning this research, a mixed method strategy was employed. By juxtaposing qualitative and quantitative modes of analysis, the inherent weaknesses could potentially be offset and their advantages combined (Meyer, 1982; Denzin, 1970). This strategy yields rich data "of behavior in context that complement numerical data and facilitate their interpretation" (Meyer, 1982: 517). Considering this as appropriate for the research concerned, the inquiry takes a deductive approach as outlined below.

Figure 6.1: The Deductive Inquiry Process



Source: Adapted from Bryman, 2012; Wass and Wells, 1994

A useful approach to research design in mixed methods is the 'Sequential Explanatory Design' (Creswell, 2009) in which "multiple approaches to data collection, analysis and inference are employed in a sequence of phases" (Tashakkori and Teddlie, 1998: 149). As shown in Figure 6.2, the data collection occurs in two phases rather than simultaneously. The initial quantitative data collection phase results inform the second, qualitative data collection stage.

Figure 6.2: The Sequential Explanatory Design



Source: Creswell (2009) *Research Design. Used with permission of the publisher* * QUAN in capitals denotes the main focus, or weighting of the inquiry

This sequential explanatory design is typically devised with a heavier quantitative weighting and the quantitative results are explained, interpreted and further substantiated by the subsequent qualitative data (Creswell, 2009). This is particularly useful when unexpected results arise from the quantitative data (Morse, 1991; Creswell, 1991).

Ivankova *et al.* (2006) explains that the rationale for the sequential explanatory design is that the second phase provides a general understanding of the participants' views in more depth (Ivankova *et al.*, 2006; Tashakkori and Teddlie, 1998; Creswell, 2003). By triangulating these techniques, a clearer picture will be formed compared to using individual techniques that could overlook areas (Kelle cited in Johnson *et al.*, 2007). Adapting from this sequential explanatory design, the following data collection procedure highlighted in Table 6.7 is adopted and discussed in the next section. Phase three represents the analysis and findings stage whereby the results from the two data collection stages are synthesised and interpreted.

Stage of I	Stage of Inquiry Process		
Phase 1	Quantitative	Large scale survey	
		Preliminary analysis of survey responses	
Phase 2	Qualitative	Semi-structured telephone interviews – random sample from survey respondents	
		Preliminary analysis of interview transcripts	
Phase 3	Analysis	Aggregate data analysis	
		Produce findings	

|--|

The following section examines the processes adopted for phase one and phase two data collection stages in detail.

6.5.1 Phase 1: Quantitative Data Collection

A 'self-completion questionnaire' was the chosen method for the large-scale survey as respondents are able to complete it at a convenient time and place of their choice, while the presence of an interviewer may bias the responses (Bryman, 2012). Additionally, whilst structured interviews could have provided adequate quantitative data, it is often much more time-consuming than surveys. Questionnaires are also much more economical to administer than to interview such a large population, particularly one that is geographically dispersed (*ibid*.). Thus, the use of a questionnaire was deemed most appropriate since the research seeks to engage the views of a wide range of social enterprises and enabled the researcher to do so in a relatively short time frame. It also supported a quick initial analysis of social innovation in social enterprises and questionnaires are an acknowledged tool for capturing data (Easterby-Smith *et al.*, 2002). Although a case study approach may have also captured the varying views of different types of social enterprises, it would not have

been possible to engage with such a large population of organisations. In addition, careful sampling would have had to be used to ensure sufficient representation of the different types of social enterprises and this would still not necessarily lead to findings that could be generalisable (Easterby-Smith *et al.*, 2002).

Costs could be greatly reduced if the questionnaires were distributed via the Internet as opposed to postal questionnaires. Regarding the channel of distribution for the questionnaire, two Internet platforms were considered; Survey Monkey and Qualtrics. Whilst both online platforms are widely used and the user interface (UI) are simplistic and 'user friendly' (Blakesley and Hoogeveen, 2011), it was decided that Qualtrics would be more suitable as it allowed for individual 'log in' paths (using the automated personalised e-mail) and computer Internet Protocol address (IP) tracking. This reduces the number of anonymous duplicate responses and allows respondents to leave the survey midway, save, and return at a later date via the personalised log in. It also facilitated follow-up reminder e-mails to respondents with incomplete surveys and progress tracking reports for individual responses.

Questionnaire design

The survey was part of a larger study conducted by the Royal Bank of Scotland called the SE100 and was built from a basic structure taken from previous SE100 surveys. The SE100, an index created by Matter&Co Ltd⁷ in partnership with the Royal Bank of Scotland, was launched in 2009 to study the phenomena behind social enterprises in the UK by an annual survey. The top 100 social enterprises are selected each year based on indicators such as growth and social impact. The researcher had the opportunity to participate in the 2011-2012 run of the questionnaire by contributing extra questions that focused on social innovation to the survey. The SE100 previously had not measured social innovation but, reflecting the growing appreciation of social innovation and the notion of social enterprises being a contributing factor, the survey sponsors were keen to support research in social innovation.

Figure 6.3 below presents a flow diagram depicting the questionnaire design process, how the survey structure was created and the subsequent distribution phases.

⁷ Matter&Co Ltd is a multidisciplinary communications organisation that specialise in marketing and public relations for values-driven organisations to deliver social impact.

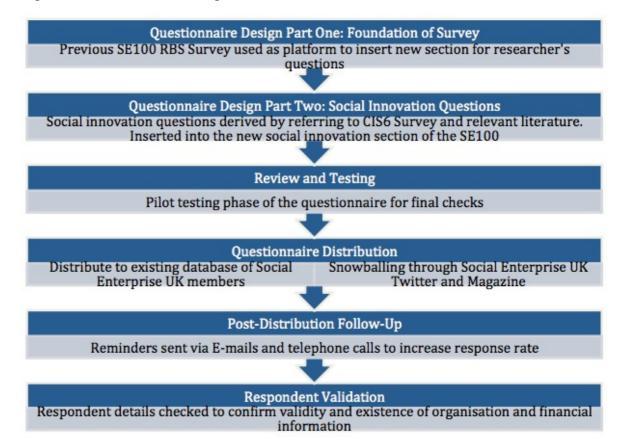


Figure 6.3: Questionnare Design Process

Questions on social innovation were developed from the Community Innovation Survey (CIS) and drawing on the literature review. The CIS is developed by the European Union (EU) as part of the EU science and technology statistics and is conducted by the Department for Business Innovation and Skills (BIS) in the UK every four years prior to 2005 and biannually since. The survey has been thoroughly tested throughout UK and Europe. The purpose of the CIS is to investigate the level of innovative activity in enterprises, the economic conditions in which these innovations are developed and implemented, the contributing factors and constraints to innovation performance. Hence the CIS is in line with the rationale behind this research project and was adapted to investigate the contributing resources and capabilities in the process of innovation employed by social enterprises. Questions were adapted from the sixth run of the CIS (CIS6), which took place in 2009.

The questions were developed to address three main areas: social innovation, the type of social innovation activity, and relationships for social innovation. Initial questions were to

identify whether the social enterprises were undertaking social innovation, based on a definition of social innovation presented to the respondent, and the type of social innovation undertaken whether 'new to the world' or 'new to the organisation' (Bessant and Tidd, 2011; CIS, 2009).

Once it can be identified that the social enterprise is undertaking social innovation, the researcher sought to explore how these innovative activities are developed. Specifically, the subsequent questions were directed at whether the social enterprise engages in relationships with external organisations and what roles these linkages play in the process of social innovation in terms of the support and resources the organisations provided. Derived from pertinent literature and the CIS surveys, seven relationship factors (see Chapter Five) were presented in the questionnaire to examine and identify the elements that drive and underpin the engagement and development of relationships with external organisations.

Distributing the survey

Due to the ambiguous size of the social enterprise population, the chosen sample was taken from membership of Social Enterprise UK, a national body for social enterprises that has wide national coverage of the social enterprises in the UK. Membership of Social Enterprise UK is estimated at 500 social enterprises. Furthermore, to expand the population sample, following similar methods of Chang (2008), the questionnaire was launched on the Social Enterprise UK magazine website and responses invited via Twitter. This procedure aimed increases the response rate within a short time-frame, by exploiting the Internet for its aptness, coverage, temporal and spatial independence and confidentiality (Chang, 2008).

Initially, the questionnaire was piloted amongst an expert panel comprising of five academics and participating organisations that formed the wider team of involved in the SE100 survey: Knowing and Growing Ltd., the Royal Bank of Scotland, and Matter&Co Ltd. Following the test period, the questionnaire was finalised by customising the online scripts for a smoother questionnaire procedure and enabling subjects to be directed to pertinent questions and avoid missing questions (Chang, 2008). Subsequently the questionnaire was launched in early June 2012 and remained live until September 2012.

The target respondents were invited first by e-mail with a link to the web-based survey located on the online platform Qualtrics. Following the launch, e-mail invitees were telephoned in a follow-up procedure to ensure the highest possible responses. Qualtrics' IP address tracking function assisted in the data cleaning process, preventing invitees from submitting multiple responses online. In addition to the IP control system, the data were checked manually to remove incomplete or duplicates responses; triangulation was employed by cross-checking core data with social enterprise websites and the Charities Commission⁸.

6.5.2 Phase 2: Qualitative Data Collection

Interviews

The most common modes of qualitative data gathering include interviews, focus groups and participant observations (Fossey *et al.*, 2002). Interviews were chosen as the method for data collection for the second, qualitative phase following the initial questionnaire stage. Semi-structured interviews rather than structured or unstructured interviews were selected as the means for data collection due to several primary considerations. First, semi-structured interviews "are well suited for the exploration of the perceptions and opinions of respondents regarding complex and sometimes sensitive issues and enable probing for more information and clarifications of answers" (Barriball and While, 1994: 330). Second, semi-structured interviews rather than structured interviews were chosen as they offer "sufficient flexibility to approach different respondents differently while still covering the same areas of data collection" (Noor, 2008: 1604). Lastly, the nature of social enterprises meant they were comprised of varied personnel, with different professional, educational and social backgrounds, which precluded the use of standardised interview formats (Barriball and While, 1994).

Interviews are used to facilitate more focused exploration of a specific topic (Fossey *et al.*, 2002) and thus tend to be organised around a set of predetermined open-ended questions (DiCicco-Bloom and Crabtree, 2006) forming an interview guide (Fossey *et al.*, 2002), with other non-predetermined questions emerging from the dialogue during the interview (DiCicco-Bloom and Crabtree, 2006). Semi-structured interviews allow for the opportunity

⁸ The Charity Commission is a non-ministerial department of the UK government that registers and regulates charities in England and Wales.

to probe interviewees where appropriate and also give interviewers flexibility in the wording of each question (Barriball and While, 1994; Hutchinson and Skodol-Wilson, 1992). Furthermore, probing can also be utilised as a tool to ensure reliability of the data (Barriball and While, 1994: 331) as it:

- 1. Allows for the clarification of interesting and relevant issues raised by the respondents (Hutchinson and Skodol-Wilson, 1992).
- 2. Provides opportunities to explore sensitive issues (Bailey, 1987; Nay-Brock, 1984).
- 3. Enables the interviewer to explore and clarify in-consistencies within respondents' accounts.
- 4. Can help respondents recall information (Smith, 1992).

Whilst face-to-face interviews allow the researcher to observe informal, and non-verbal communication (Creswell, 1998), there are many advantages to telephone interviewing. A study by Sturges and Hanrahan (2004) concluded that, in a comparison of transcripts between face-to-face interviews and telephone interviews, "the interview transcripts revealed no significant differences in the interviews" (*ibid*.: 107).

Telephone interviewing is advantageous especially when accessing geographically dispersed respondents (Sturges and Hanrahan, 2004; Fenig and Levav, 1993). It can overcome respondent reluctance (Creswell, 1998) and provides the opportunity to obtain data that are otherwise difficult to access in person (Miller, 1995; Tausig and Freeman, 1988). Therefore this can mean that telephone interviewing is cost-effective for the researcher (Miller, 1995; Tausig and Freeman, 1988) compared to other methods of interviewing that involves the researcher travelling to meet the respondent in person. Furthermore, the "partial anonymity granted by the telephone may increase the validity of responses by reducing the embarrassment involved in responding to emotionally or socially loaded questions in a face-to-face situation" (Fenig and Levav, 1993: 1). The respondents provide verbal cues such as hesitations or sighs (Sturges and Hanrahan, 2004) for probing or further questions.

The above points highlight the appropriability of telephone interviewing within the context of this study, counteracting the belief that telephone interviews are "typically seen as appropriate only for short (Harvey, 1988), structured interviews (Fontana and Frey, 1994) or specific situations (Rubin and Rubin, 1995)" (Sturges and Hanrahan, 2004: 108). The

semi-structured interview format is seen to be most appropriate for the research and is in line with the realist paradigm. Semi-structured interviews allows for interviewees to freely express and elaborate on their answers to questions posed whilst the overall process is guided by various key questions and themes to avoid digressing substantively from the topic.

The interview protocol was divided into three sections with 21 guide questions (see Appendix II), with additional questions where appropriate to probe or explore further for idiosyncratic cases. The protocol was organised under the following themes:

- 1. Questions relating to general demographic information.
- 2. Questions relating to how external relationships influence the process of social innovation.
- 3. Questions relating to access to any relevant sources of knowledge and skills outside the organisation.
- 4. Questions relating to how the innovation strategy is formulated within the organisation.

The sample of prospective interviewees is a random selection of 80 respondents who completed the online survey and who, in that survey, indicated willingness for further contact. These respondents were contacted initially via telephone to gain consent, and then by e-mail with relevant information about the telephone interview procedures and questions. The number of interviews achieved duration of each interview will be presented in Chapter Eight along with the interview results.

6.6 Chapter Summary

The chapter provides an overview of research context, paradigms and associated methodologies that provide the strategy of inquiry. The rationale for the positivist realist (Wass and Wells, 1994) philosophical position for this research was presented. The paradigm subsequently underpins the mixed method research approach of the inquiry, which comprises a two-phase 'sequential explanatory design' (Creswell, 2009). Hence, the empirical data collection for the purpose of this research is in two parts; the first collects quantitative data by means of an online-distributed questionnaire, followed by the second part that undertakes semi-structured interviews with a random sample of the questionnaire

respondents. In the following two chapters, the findings of the data collection and analyses will be presented; first, the quantitative phase and second, the subsequent qualitative stage.

7 Phase One: Quantitative Data

7.1 Introduction

The previous chapter described the research design as a 'sequential explanatory mixed methods' (Creswell, 2009) and indicated that the design will be implemented in two major phases for data collection; the quantitative phase and the qualitative phase. This chapter presents the findings from the data collected from the first stage. As aforementioned, the quantitative data were collected by conducting a survey to approximately 500 members of the Social Enterprise UK organisation by means of an online platform to distribute the questionnaire electronically during the period of June and September 2012. The survey resulted in 262 respondents, of which 246 observations were used for statistical analysis as explained below.

7.2 <u>Measures</u>

Dependent Variable: Measurement of Social Innovation Performance

The focus of the thesis is to find the link between resources and capabilities and social innovation. Social enterprises undertaking social innovation, defined as "innovative activities and services that are motivated by the goal of meeting a social need" (Mulgan, 2006: 146), were measured against a scale on which social enterprises scored from one to four, according to the type of innovative activities the organisation were undertaking. The scale indicated the extent to which the innovative activities were radical, as opposed to incremental; low scoring enterprises were those undertaking less radical innovative activities and enterprises undertaking more radical innovations received a higher score. This scale consisted of the following categories:

- a) undertook no innovative activities;
- b) undertook some innovative activity but not new to world or new to firm suggesting marginal or incremental innovative activity;
- c) undertook innovative activities that are new to firm;
- d) undertook innovative activities that are both new to firm and new to world;
- e) undertook innovative activities new to world.

A score of one was assigned to those responses that indicated they undertook some innovative activity but activity that is not deemed 'new to the world' nor 'new to the firm',

suggesting that, these activities consisted of marginal innovations. The next category consisted of social enterprises that undertook innovative activities that are 'new to the firm'. The third category were those who undertook innovative activities that are both 'new to the firm' and some that are 'new to the world'. The highest score is given to the category of social enterprises which undertook innovative activities that were solely 'new to the world', which is defined as "this enterprise engaged in an innovation activity before any other organization" (CIS, 2006), indicating a focus on most radical innovation. The respondents that indicated that they undertook no innovative activities received a score of zero, as there is no innovation output.

Independent Variable: Relationship Drivers

The seven drivers were derived from the innovation and dynamic capabilities literature as well as the CIS survey. The purpose is to investigate whether these drivers formed separate categories, in other words, if the motives for engaging in relationships were distinctly linked to a particular stage of social innovation. This was for the purpose of testing the conceptual model and its two stages of the social innovation process. In order to manage either of the stages, it is suggested that the motives fell into distinct groupings. These relationship drivers were the motive to: gain new skills, develop new knowledge, build expertise, exploit opportunities, access new markets, access new communities and access new stakeholders. These data were subjected to principle components analysis to create two composite scores: seizing/selection, and scaling/implementation. The procedure is presented in Section 7.4 below

Control Variables:

The following variables were selected as control variables. Control variables are constant elements in testing for relationships between other independent variables. For each individual variable, the specifications are described below accordingly.

Social Firm Within the overall category of social enterprises, this was a sub-category offered in the survey originating from the former SE100 questions. Subsequently the researcher sought to control for those that have a very specific purpose of job creation (i.e. 'social firm'). Due to their employment-driven agenda, the social innovation of these firms may be different than that of other social enterprises. A social firm is defined as "a market-led social enterprise set up specifically to create good quality jobs for people severely

disadvantaged in the labour market" (Social Firms UK). Their common goal is to "use their market-orientated production of goods or services to achieve their social mission" for employment (Social Firms Europe CEFEC). Social enterprises were coded with a dummy variable (1 =social firm; 0 =not a social firm)

Age of Firm The age of firm is calculated as the number of years since the social enterprise was set up. This control is used to take into account possible effects, particularly advantages, of more established organisations.

Size of Firm The size of firm was calculated in two ways: by employee base and also by the turnover. These are commonly used controls to account for larger firms with a greater employee base or turnover amount and therefore more likely to have a greater resource capacity. Data from the year 2011 on size were used to provide a one-year time lag to assess the effect of size on relationships and innovation. The number of employees was calculated as the total number of persons employed full- and part-time in 2011 and the value of turnover is calculated as the value of annual turnover in 2011.

Sector The use of this variable is to capture the effects of the industry sector on the organisation. There were 14 sectors of operation from which social enterprises were asked to select the most applicable. The organisations were asked to indicate primary sectors in which they operated. For this variable, only the primary sector value was taken. These were coded with a dummy variable where 1 = sector of interest, 0 = otherwise. Due to the small number of social enterprises in some sectors, the 14 sectors were recoded into eight. The 8 sector categories available to the respondents were the following:

- 1) Finance;
- 2) Health and social care;
- 3) Housing;
- Business services 'business services/consultancy' and 'marketing and communications' sectors;
- Training and employment services 'education and youth' and 'employment and training' sectors;
- Environment and renewables 'environment and recycling', 'regeneration' and 'renewables and utilities' sectors;

- Retail and leisure organisations in 'leisure, sports, arts and culture' and 'retail (including fair trade)' sectors;
- 8) Other services social enterprises operating in 'other' and 'transport' sectors.

Geographical Region This variable captures the effects of geographical region on the social enterprise and its social innovation(s). It is assumed that the geographical context and market opportunities may influence the degree of innovation. From the original 14 regions, some of the smaller regions were recoded to form nine larger composite regions. Respondents indicated which regions they mainly traded in and responses were coded with a dummy variable where 1 = geographical region of interest; 0 = otherwise. The resulting nine regions include:

- 1) East;
- 2) London;
- 3) Midlands 'East Midlands' and 'West Midlands';
- 4) North East;
- 5) North West;
- 6) Wales, Scotland and Northern Ireland;
- 7) West;
- 8) Yorks and Humber;
- 9) Multiple Regions 'more than one region' and 'outside UK'.

The variables used for this empirical research are summarised as below:

Table 7 1 [.] Summ	ary of Variables

Variable	Description	
Social innovation	Measure of the extent to which social enterprises undertake social	
	innovative activities from marginal to radical	
Relationship	Classification of the dynamic capabilities driving the engagement of	
drivers	relationships with external organisations	
Control		
Variables		
Social firm	Dummy variable for social enterprises that satisfy UK social firms	
	status	
Age of firm	Number of years since establishment of the social enterprise	
Size of firm	Number of employees employed full- and part-time in 2011 and	
	turnover in 2011	
Sector	Dummy variable to indicate sector of operation	
Geographical	Dummy variable to indicate the region of operation	
region	-	
Sources of data all from questionnaire responses		

7.3 <u>Sample Description</u>

Once online questionnaire deadline had passed, Qualtrics facilitated the ability to export all responses to a spreadsheet format (.csv) for finalising. From the 262 respondents, social enterprises not trading in 2011 were removed, resulting in 246 observations that provided data for the variables required for the statistical analysis. The data were double-checked and initial descriptive analysis was conducted, followed by statistical techniques such as factor analysis and regressions to test the conceptual model and hypotheses. An overview of the 246 respondents is provided below:

The Social Firm Of the 246 observations, 128 (52.0%) of the social enterprises indicated that they are a social firm (i.e. have a primary focus on employment for disadvantaged groups).

Geography and Regions In terms of the geographic distribution, many of the social enterprises operate across multiple regions (21.1%), Wales, Scotland and Northern Ireland (15.4%), the East (12.6%), London (10.2%), the North West (9.8%) as illustrated in Figure 7.1 below. It appears that apart from those that operate in multiple regions, social enterprises are operating mainly in the eastern region of the UK and around the London area.

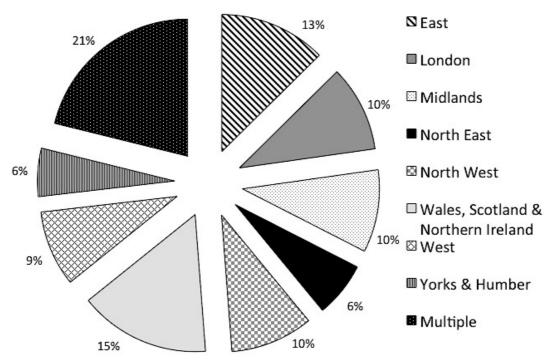


Figure 7.1: Regional Breakdown of Social Enterprises

Age of Firm The average age of the firm was 11 years. Over 76% of the social enterprises have been operating for more than three years, with the remaining start-ups accounting for 23.6% of the observations (but having at least one year trading).

Organisation Size: Turnover Of the 246 observations, only 227 social enterprises provided turnover information for the year 2011. The average turnover for the total sample was $\pounds 1.9m$. Further scrutiny shows start-ups had an average turnover of $\pounds 201, 251$, with the remainder having an average turnover of $\pounds 2.3m$.

Organisation Size: Employee Base As presented in Table 7.2, the social enterprises observed were mainly SMEs. Specifically, 56.5% of these were micro-enterprises that employed less than 10 people. Only 4.5% of the organisations were large firms, employing more than 250 people.

Firm Size by Number of	No. of Social	Percentage
Employees	Enterprises	(%)
Micro (<10)	139	56.5
Small (10-49)	73	29.7
Medium (50-249)	23	9.3
Large (>250)	11	4.5

Table 7.2: Firm Size

Sectors As shown in Table 7.3 the largest sector in which UK social enterprises operate is 'education, training and employment' sector (25.6%), followed by 'business services' (17.5%), 'environment and renewables' (13.8%, and. 'health and social care' (12.6%).

Primary Sector	No. of Social Enterprises	Percentage (%)
Business Services	43	17.5
Education, Training and Employment	63	25.6
Environment and Renewables	34	13.8
Finance	12	4.9
Health and Social care	31	12.6
Housing	17	6.9
Retail and Leisure	31	12.6
Other	15	6.1

Table 7.3: Primary Sectors of Operation

7.4 Relationship Drivers

In testing the conceptual model (Chapter Five, Figure 5.5) a multiple response question was employed to discover whether social enterprises engaged in relationships for social innovation with other organisations and the motives for undertaking these relationships. The initial step was to reveal the two dimensions of relationship drivers as proposed in the conceptual model. As aforementioned, the seven relationship drivers should fall into two distinctly separate groupings, where each of the two groups represents a stage in the social innovation process. In order to model this, a Categorical Principal Components Analysis (CATPCA) was undertaken. This approach exposes the pattern of the relationship drivers by reducing the number of factors included in the survey that are similar to one dimension and also demonstrates the distance and differences between the two dimensions. This method was chosen as the presence of binary data in the survey responses meant traditional factor analysis would have been less suitable and may provide skewed results as it would focus on distribution similarity as opposed to similarity in the content of the constructs being measured (Meulman, and Heiser, 2011).

This analysis was performed using the Categorical Principal Components (CATPCA) procedure using SPSS⁹. The test results revealed and demonstrated that there are indeed two significant dimensions of relationship drivers that differ considerably. Referring to the CATPCA model (Figure 7.3), two vectors are shown by the long lines in the figure indicating these two dimensions account for most of the variance: Dimension 1 indicates the seizing and selection phase of the process of social innovation and Dimension 2 represents the second, scaling and implementation phase. Dimension 1, representing 'seizing and selection' from the conceptual model gave high positive component loadings on the relationship drivers: developing skills, knowledge and expertise. In contrast, Dimension 2, which represents the relationship drivers for 'scaling and implementation', corresponding to the second stage of the conceptual model, lies in the opposite direction, demonstrating a distinct dissimilarity. This dimension comprises the four relationship drivers: exploiting opportunities, new markets, new communities and new stakeholders.

⁹ SPSS is a computer software package that enables data management, statistical analysis and reporting.

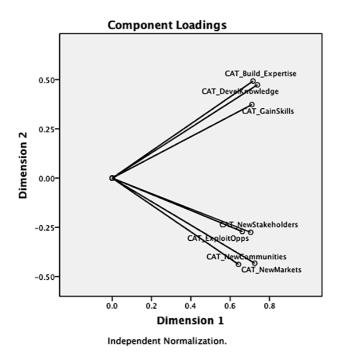


Figure 7.2: Categorical Principal Components Analysis - Relationship Drivers

Statistically, the CATPCA model produced two distinct and relevant dimensions with an Eigenvalue greater than one, as required for each, as the Eigenvalue is a measurement of the amount of variance accounted for by each of the two dimensions. Additionally, the model retrieved a score of 0.91 on Cronbach's alpha, an indicator of reliability (see Table 7.4 below).

Dimension	Cronbach's	Variance Accounted For							
	Alpha	Total (Eigenvalue)	% of Variance						
1	.827	3.433	49.041						
2	.138	1.134	16.195						
Total	.911 ^a	4.566	65.235						

Table 7.4: CATPCA Model Summary

a. Total Cronbach's Alpha is based on the total Eigenvalue.

The table below presents the component loadings of the CATPCA analysis showing individual weightings for the drivers and the dimensions, which they fall into. The component loadings (as shown in Table 7.5) are plotted in Figure 7.2 as a graphical representation of the results.

		Dimension
	Seizing/ selection	Scaling/ implementation
To gain new skills	.710	.373
To develop new knowledge	.738	.573
To build expertise	.716	.493
To exploit opportunities	.661	271
To access new markets	.725	432
To access new communities	.642	438
To access new stakeholders	.704	275

Table 7.5: CATPCA Component Loadings - Relationship Drivers

Independent Normalization.

The CATPCA scores on each of the two dimensions revealed by this analysis were subsequently saved into SPSS to create the two variables "Seizing and Selection Relationships" and "Scaling and Implementation Relationships" to be used in the hierarchical regression in the following section.

The bivariate correlations between the variables are presented in Table 7.6. All of the variables fall below the normally accepted maximum threshold for correlation of .7, except that turnover and employment are highly and significantly correlated at .654. These two variables are both measures for the size of the organisation and thus expected to be correlated as they often are. The high correlation value for these two variables was further examined in the collinearity diagnostics. Due to high levels of multi-collinearity between them, models were run with turnover only and with employment only, the latter being better fitting. Hence the turnover variable was dropped when performing the regression.

Multi-collinearity occurs where the variables measure essentially the same construct and is problematic as there is a high level of shared variance between variables. Examination of the variance inflation factors (VIFs) and the Condition Indices is done in SPSS. While there are no definitive cut-off points above which multi-collinearity can be considered a serious problem, high shared proportion on the Condition Indices for two or more coefficients indicates a serious collinearity problem, especially when the value is above the variance proportion threshold of 90% (Hair *et al.*, 1998).

Table 7.6: Correlation Matrix of Variable

	Social Firm	Total Employment 2011	Age	Turnover 2011	North East	North West	Yorks & Humber	Midlands	West	East	London	Wales Scotland & NI	Multiple Regions	Business Services	Education, Training & Employment	Environment & Renewables	Finance	Health & Social Care	Housing	Retail & Leisure	Other	Seizing/ Selection
Total Employment 2011	-0.131* -0.057	1 0.264**	1				-					-										
Age Turnover 2011	-0.057	0.264**	1 0.324**	1																		
North East	0.022	0.031	0.140*	-0.014	1																	
North West	-0.041	0.179**	0.001	0.077	-0.087	1																
Yorks & Humber Midlands	-0.08 0.014	-0.065 -0.073	0.012 -0.084	-0.06 -0.088	-0.065 -0.087	-0.081 -0.108	1 -0.081	1														
West	0.044	-0.011	0.12	0.038	-0.083	-0.103	-0.077	-0.103	1													
East	0.095	-0.106	-0.063	-0.072	-0.1	-0.125	-0.093	-0.125	-0.119	1												
London	0.054	-0.015	-0.019	-0.119	-0.089	-0.111	-0.083	-0.111	-0.105	-0.128*	1											
Wales Scotland & NI	-0.130*	-0.02	-0.023	-0.027	-0.113	-0.141*	-0.105	-0.141*	-0.134*	-0.162*	-0.144*	1										
Multiple Business Services	0.019 -0.072	0.063 -0.079	-0.029 -0.037	0.017 -0.094	-0.137* -0.035	-0.170** 0.065	-0.127* -0.021	-0.170** 0.065	-0.162* -0.069	-0.197** -0.078	-0.174** 0.022	-0.221** 0.033	1 -0.076	1								
Education, Training & Employment	0.079	-0.043	-0.107	-0.036	-0.117	-0.036	-0.024	0.058	0.045	0.03	0.08	0.033	-0.076	-0.270**	1							
Environment & Renewables	0.007	-0.111	-0.05	-0.084	0.038	-0.013	0.054	-0.092	-0.002	0.025	-0.018	0.09	-0.063	-0.184**	-0.235**	1						
Finance	0.142*	-0.043	0.012	-0.039	0.170**	-0.011	0.026	-0.11	-0.071	0.028	-0.076	-0.045	0.021	-0.104	-0.133*	-0.091	1					
Health & Social Care	-0.028	0.071	-0.013	0.043	-0.001	0.04	0.012	0.082	0.01	-0.033	-0.087	-0.061	0.043	-0.175**	-0.223**	-0.152*	-0.086	1				
Housing	-0.059*	0.094	0.089	0.144*	0.123	0.072	0.002	-0.09	-0.029	-0.055	0.014	0.017	-0.023	-0.125*	-0.160*	-0.109	-0.062	-0.103	1			
Retail & Leisure	-0.028	0.006	0.061	-0.015	-0.05	-0.042	-0.04	-0.001	0.01	0.077	0.034	0.007	-0.017	-0.175**	-0.223**	-0.152*	-0.086	-0.144*	-0.103	1		
Other	0.027	0.197**	0.154*	0.174**	0.002	-0.084	0.011	-0.084	0.099	0.006	-0.029	-0.062	0.118	-0.117	-0.150*	-0.102	-0.058	-0.097	-0.069	-0.097	1	
Seizing/ Selection	0.047	0.093	0.071	0.087	0.039	0.048	0.003	-0.054	-0.071	-0.013	0.03	-0.021	0.035	-0.075	0.038	0.017	-0.027	0.112	-0.102	-0.087	0.123	1
Scaling/ Implementation	-0.031*	-0.06	0.117**	-0.058**	0.011	0.070**	0.066	-0.118	0.055	0.05	0.067	0.162	-0.282	-0.064	-0.061	0.099	-0.048	-0.073	0.095	0.104	-0.031	-0.008

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

7.5 <u>Results</u>

The effect of engaging and developing relationships with external organisations on social innovation performance is hypothesised as:

- H1: Relationships by social enterprises with other organizations to match internal capabilities with external opportunities (seizing/selection) that are positively related to social innovation performance.
- H2: Relationships by social enterprises with other organizations build internal capabilities (scaling/ implementation) that are positively related to social innovation performance.

As a result of the two distinct dimensions of relationship drivers identified above using the CATPCA statistical test, a hierarchical regression analysis (Field, 2009) was performed in order to estimate the degree to which these drivers influence social innovation. Zero-order correlations for all variables were examined. Subsequently, controls were included in the model in order to account for systematic firm differences that could explain variance in the dependent variable, social innovation. These included firm age, status as a social firm, dummy variables that capture the effects of geographical location in the regions of the UK (social enterprises across multiple regions as default) and dummy variables to account for the effects of industry sector (see Table 7.1 for summary of variables).

Two models were run by the researcher, first without the two stages of the social innovation process and the second model with the two variables included.

Model	R	R^2	Std. Error of	ΔR^2	F	P value
			the Estimate			
1	.355a	.126	1.002	.126	1.813	.025
2	.393b	.154	.990	.028	3.788	.024

Table 7.7: Hierarchical Regression Model Summary

As illustrated below in Table 7.7, Model 1 contains the statistics for the baseline model containing all controls. Model 2 is the full model including the two composite scores for the relationship drivers: "Seizing and Selection Relationships" and "Scaling and Implementation Relationships".

Predictor	Model 1	Model 2
(Constant)	3.305***	3.245***
Social Firm	0.042	0.032
Age	.086	0.071
Total Employment 2011	-0.89	-0.094
East of England	-0.204**	-0.20**
West of England	-0.26***	-0.255**
London	-0.013	-0.23
Midlands	-0.168*	-0.160*
North East of England	-0.236**	-0.246**
North West of England	-0.152*	-0.166*
Yorkshire and Humberside	-0.148*	-0.153*
Wales, Scotland and Northern Ireland	-0.185*	-0.192*
Business Services	-0.062	-0.22
Education, Training and Employment	0.095	-0.124
Environment and Renewables	0.001	0.022
Finance Sector	-0.011	-0.014
Health and Social Care Sector	0.069	0.078
Housing Sector	-0.012	0.026
Retail and Leisure	0.009	0.045
Seizing and Selection		0.173*
Scaling and Implementation Relationships		0.031
Model Total R^2 .154; ΔR^2	.126	.028*

Table 7.8: Drivers of Social Innovation - Summary Results of Hierarchical Regression

[†]p < .10, * p < .05, ** p < .01, *** p < .001 Omitted variable for comparison of regions is 'Operate across multiple regions.'

Results from the regression show that Model 2 that included the relationships drivers in their respective stage of social innovation is significant at 5%. Furthermore, results show that relationships engaged for the purpose of seizing and selecting socially innovative activities or social innovation is positively influencing social innovation and is significant at 5%. As evident from Table 7.8, whether the social enterprise had a social firm status or not, did not have a significant effect on social innovation. This was also the case for the age or the size of the firm. Although figures for social firm, age and total number of employees were positive, these were insignificant. In terms of geographical region, all of the areas of operation had a negative influence on social innovation when compared to those social enterprises that operate across multiple regions, with the East, West and North East regions significant at 1%. The Midlands, North West, York and Humber, Wales, Scotland and Northern Ireland regions were significant at 5%.

None of the sectors showed significant influence on engaging in social innovation. Multicollinearity was slightly high in Model 2 with a condition index value at 12.502. The occurrence of high multi-collinearity was in the following sector variables with their respective scores: 'business services' (0.73), 'education, training and employment' (0.74), 'environment and renewables' (0.66), the 'health and social care' (0.64) and 'retail and leisure' (0.64).

7.6 Summary of Findings

For the purpose of testing the conceptual model, the main emphasis of the findings was geared towards the relationship drivers and the two stages of the social innovation process. The CATPCA confirmed that the relationships drivers indeed fell into two distinct dimensions that represented the two stages of social innovation.

A hierarchical regression was run to test whether the two hypotheses offered by the researcher would be supported. Hypothesis One proposed that relationships with external organisations developed by the social enterprise which harnessed capabilities for seizing and selecting socially innovative opportunities are positively related to social innovation. The regression results support Hypothesis One (p < .05).

For Hypothesis Two, which proposes that relationships that harness capabilities for scaling up and implementing socially innovative activities, the results required more consideration. When observing the responses individually, in relation to the conceptual model and the two phases of social innovation, more social enterprises identified relationships drivers that supported the implementation of socially innovative activities, namely the second stage of social innovation process, than those related to the identification of opportunities, the first stage of the social innovation process. However when further examined as composite scores, the regression only displayed a significance in the first dimension, that is, the seizing and selection phase of the social innovation process. Therefore the null hypothesis for Hypothesis Two could not be rejected (p < .05) and thus the hypothesis is not supported.

Upon further inspection on other variables, the measures for firm size, social firm status and the age of firm were insignificant. Furthermore, in the perspective of engaging in relationships, this could suggest that, these social enterprises are relying on external linkages, as they did not have sufficient number of employees or experience that larger or more established organisations might have. The insignificance of the influence from sector of operation may also be due to a similar factor; the presence of the social enterprise in multiple sectors, coupled with possible external linkages in various sectors and backgrounds could mean that the sector origin of the enterprise has little effect on the social innovative activities. The occurrence of mildly high multi-collinearity in sector variables can be explained by the nature of social enterprises operating in more than one sector and thus overlapping data would surface. This was checked against the bivariate correlation matrix (Table 7.6) and despite slightly high multi-collinearity, variable correlations for sectors were well below threshold.

Despite results only supporting relationship drivers in the first stage of the social innovation process (Hypothesis One), it was evident that it was necessary to further investigate the individual relationship drivers and their role in respective social innovation phases by means of semi-structured interviews designed into the mixed methods approach.

7.7 Chapter Summary

This chapter has presented descriptive statistics from the data collated from the questionnaire and also results from conducting the CATPCA and hierarchical regression. The CATPCA revealed that the relationship drivers for social innovation fell into two distinct dimensions, thus confirming the two stages of the social innovation process. This aligns with the conceptual model developed from the literature, which proposes that social innovation occurs in two distinct phases. The regression model has indicated a positive significant influence of the seizing and selection relationship drivers on social innovation supporting Hypothesis One. The Hypothesis Two, which hypothesises that the elements of second stage of the social innovation process is positively related to perceived social innovation, has not been supported in this case. The following chapter presents the findings and interpretation of the 31 transcribed interviews conducted by telephone, further investigating the results of the quantitative data, and highlight additional insight.

8 Phase Two: Qualitative Data

8.1 Introduction

Following from the previous chapter that presented the findings from the quantitative data collection, this chapter presents the findings from the qualitative data collected from 31 semi-structured telephone interviews. To commence with, details of the analysis process, including the coding and transcribing protocols will be explained. The chapter goes on to relate the findings to the conceptual model presented in the conceptual framework chapter (Chapter Five). The findings from the transcribed interviews will be presented in two sections 'seizing and selection' and 'scaling and implementation', which consist of individual sub-themes relating to the drivers of relationships within their respective stage of the social innovation process. A summary of the findings will discuss additional emerging themes that surfaced to conclude the chapter.

8.2 Analysis

Interviewees were selected at random from participants of the questionnaire who indicated their willingness to participate in further studies. The respondents who provided consent to be contacted were asked via telephone and confirming emails to participate in semistructured telephone interviews. From an initial random pool of 80 prospective interviewees, 31 agreed to be interviewed. The duration of the interviews were approximately 40 minutes on average.

The resulting random sample of interviewees appears to be indicative of the respondents to the online survey in the first stage in terms of the wide spread in variance and distribution across sectors, firm size and age. Therefore, it can be assumed that the random sampling created no unintentional bias to the results. Attributes also include: occupational role and turnover of the organisation where information was available or applicable. Table 8.1 below illustrates the attributes for each participating interviewee.

Interview ID	Age of Organisation (Yrs)	Organisation Employees Organisation (Yrs)		Sector(s)	Gender M/F	Turnover (£'000)
1	13	5	Manager	Unassigned	F	250
				Environment &		
2	8	5	Director Recycling		М	110
3	6	5	CEO	Unassigned	F	120
				Health &		
4	11	32	CEO	Employability	М	1,200
				Training &		
5	7	4	Office Manager	Employability	F	330
6	9	38	CEO	Sport & Leisure	М	1,100
				Community &		
7	21	48	CEO	Education	М	850
			Accounts	-	-	
8	12	2	Manager	Transport	F	163
9	30	0	Chairman	Housing	М	N/A
10	6		D	Training &	Б	25
10	6	2	Director	Employability	F	35
11	5	42	Director	Education	F	391
12	3	0	Director	Creative Arts	F	5
13	16	31	CEO	Health & Community	M F	1,200
14	2	40		CEO Health & Social Care		350
15	11	800	CEO	Sport & Leisure	М	14,000
16	0		Assistant	Environment &		0.00
16	9	7	Director	Recycling	М	860
17	7	0	Managing	Training &	г	295
17	7	8	Director	Employability	F	285
18	4	35	Managing Director	Housing	М	2.3
10	4	55	Director	Environment &	191	2.5
19	17	26	CEO	Recycling	М	500
20	10	3	Director	Tourism	F	N/A
20	6	3	Manager	Creative Arts	F	60.383
21	1.5	2	Director	Education	F	N/A
	1.0	2	Development	Education	1	11/21
23	6	50	Manager	Health & Community	М	1,200
24	32	40	Manager	Community	M	500
				Training &		000
25	4	6	Director	Employability	F	250
			Head of Business			
26	110	300	Growth	Education	F	10,000
			Education			
27	6	20	Coordinator	Education & Finance	М	750
				Training &		
28	4	3	CEO	Employability	М	250
				Training &		
29	Closed	0	Facilitator	Employability	F	N/A
30	20	1500	CEO	Health & Social Care	М	28,000
31	6	60	Chairman	Health & Social Care	F	2,500

The telephone interviews were recorded and transcribed by the researcher and imported into the Computer Assisted/Aided Qualitative Data Analysis Software (CAQDAS) NVivo

10¹⁰ for encoding, interpretation and analysis. The encoding process comprised of initial codes using the standardised interview questions (see Appendix II for interview protocol), key terms, and 'in vivo' coding, which resulted in a coding schema containing 50 codes (see Appendix III). Additionally, attributes of each interviewee such as occupational role and gender, and attributes of their organisations, such as firm size and age, sector, and number of volunteers, were designated for data organisation.

8.3 Findings

In testing the conceptual model, the main themes revolve around the seven relationship drivers, which were explored in the interviews. The conceptual model is shown below accompanied by a table with explanatory notes for each of the seven relationship factors:

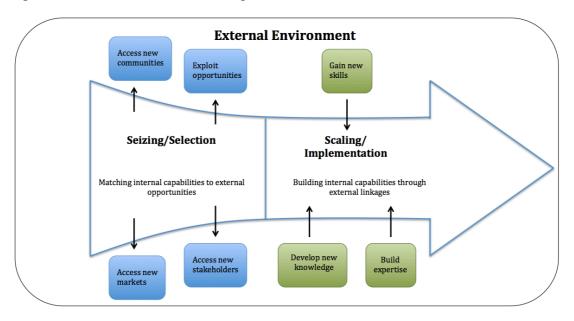


Figure 8.1: Social Innovation Conceptual Model

Table 8.2 provides a summary as to what each of the drivers represent. Using interview data, it includes examples of the range of organisations that social enterprises tend to seek to support each of these seven relationship factors that drive the process of social innovation.

¹⁰ As mentioned above, NVivo is a CAQDAS that assists in managing unstructured data, and enables coding of multimedia qualitative data for analysis.

Innovation Stage	Relationship Drivers	Description
Seizing and Selecting	Access new markets	Relationships with organisations that enable social enterprises to understand and access new market segments often through relationships with larger organisations that have their own marketing function.
	Access new stakeholders	The development of relationships with prospective key stakeholders such as public agencies, major think tanks, universities and governmental institutions.
	Access new communities	Relationships that support access to local communities through, for instance, local support groups or community action groups.
	Exploit opportunities	Development of relationships that support the pursuit of new opportunities that enables the sharing of risk through partnering with like-minded organisations, often other social enterprises and organisations in the same or similar sector(s).
Scaling and Implementing	Build expertise	Building expertise within the social enterprise often via volunteers, secondments, consultants and <i>pro bono</i> work from larger private organisations.
	Develop new knowledge	Developing relationships that expose the social enterprise to new knowledge e.g. universities, research bodies
	Gain new skills	Relationships that can support the development of new skills through working with training, support agencies and industrial or professional associations.

Table 8.2: Relationship Drivers for Social Innovation

When interviewees were asked at what stage of the innovation process are the relationships most important and why (see Appendix II question 2.2), the responses are as presented below:

Code	Number of Interviewees
Innovation Process	
Stage 1 – Seeking Exploiting	21
a) Seeking & Selection	20
b) Seizing & Exploiting	17
Stage 2 – Implementing Scaling Up	24
a) Implementing	21
b) Scaling Up	15
Relationship Drivers	
New Markets	12
New Stakeholders	11
New Communities	11
Exploit Opportunities	17
Build Expertise	12
Develop Knowledge	12
Gain Skills	13

Table 8.3: Interview Responses: Most Important Relationships for Social Innovation

Table 8.3 above shows the number of interviewees that indicated the relevant stage of the social innovation process in which relationships are important and the reason behind developing these relationships. Please note that the interviewee may discuss more than one

stage or any other corresponding 'code' or 'sub-code' as appropriate (sub-codes are indented with an alphabetical list).

The detailed interview findings in this chapter are divided into two sections, 'seizing and selecting' and 'scaling and implementing'. The sections below present the findings relating to each stage of the social innovation process.

8.3.1 Seizing and Selection

To commence with, the themes forming the 'seizing and selection' phase of the social innovation process will be explored. Table 8.4 provides insightful quotes captured through NVivo from the interviews that fall within each of the four themes related to relationships that support 'access new markets', 'access new stakeholders', 'access new communities' and 'exploit opportunities'. This is followed by more detailed analyses of insights highlighted from the interviews:

Driver	Examples
Access new markets	"if there is one big gap I think most not for profit social care organisations have got, is that ability to market test, 'cause we never had to do it before, we do have to do it now, we're not quite sure how to do it and we certainly don't have the money to do it properly, if you're really gonna market test, that costs a lot of money." [Interviewee 30]
	'we need all the tools of a commercial organisation, and one of the things is very obviously lacking, is our marketing and communications abilityBut we're learning. We're getting there slowly.' [Interviewee 7]
	"market research. What does the market really look like, what are the segments that we could aim at, what change, what we do, shift it around a bit in order to meet the needs ofa sensible segment of our population in the local area. We have the expertise to shift our services to meet that, we don't have the expertise to come up with a serious market research, what does this market look like, what it wants, what's its priorities, we don't have the expertise to market that we don't know the market enoughwe don't have enough expertise internally" [Interviewee 30]
	"We're linked into the procurement site for NHS workon there are our social care projectswe're alerted to those sort of opportunitiesthrough email contentwe're also on the approved providers list for the NHS" [Interviewee 31]
	"One of the advantages now of broadening our Boardthere's much better scope for [market] scanning, and because we all have very differentinterests and very different experiences and areas of specialism,we're scanning a much broader area than we ever were before, because there's more of us to bring that information in andthings that perhaps would not have been spotted beforethere's only so much observing of the external market that one person can do." [Interviewee 25]

Table 8.4: Seizing and Selection: Key Interview Quotes

Access new stakeholders	"We've actively tried to engage with bodieswhich apparently have very little do with what we do,that's really important as a way of generating new ways of looking at things. If we were looking at criminal justice for example,I'm not likely to find much innovation if all I'm doing is talking to prisoners in the probation service" [Interviewee 4]	
	"[creating partnerships] with other social enterprise businessesit's really about keeping ourselves at the forefront of the waste and energy environment industries in the social sectorlocal businesses,national businesses" [Interviewee 3]	
Access new communities	"Working with local people can provide[innovation]some of the large agencies, the people with the money they can be an environment for innovation." [Interviewee 4]	
	"there are no formal networksbut I'm on the board of the local neighbourhood partnership, it's a very active on so I get to know an awful lot of what goes on in the communitythat kind of networking and ever expanding network, you get to learnwho you need to ask, who's doing what, what organisations might be doing something." [Interviewee 7]	
	"a lot of it is through networking, going to meetings, talk to peoplewe work with an infrastructural organisation called [XXXX],a CVS which is a council for voluntary serviceswhat they do is basically provide assistance to start up community groups for charities." [Interviewee 7]	
Exploit opportunities	"I think a bit of courage, networking, sharing the exposure to risk with others" [Interviewee 19]	
	"I think for innovation, most of the resources for innovation largely is about networks, about relationships with the right individuals and the engagement with other areas that generate the thinkingfor the delivery or the development of innovative ideas into delivery" [Interviewee 4]	
	"in partnershipto think outside the box a bit more and thinking how to make a positive impactbut also how can we make some money." [Interviewee 14]	
	"you need people who can share that burden with you, so as you grow, you need to find more professional people who understand the vision of what you're trying to deliver, what social enterprise is all about, rather than just people who are 9 to 5 people who just want to earn some money and go home" [Interviewee 19]	
	"we worked for local health service to get funding for some gym equipment, and then we worked with a different individual who provided the gym activities in the gym And to maintain it as a sustainable activity, working with an individual that's got a specific interest in gym equipment was invaluable." [Interviewee 24]	
	"the earlier on in the process you can buy in from your partners the smoother the operation is, but logistics and just time, for such a small social business means that it's just not possible to do it all at the beginning." [Interviewee 3]	
	"Social Enterprise Scotland, the Academy for Sportkeep us in the wind of what's happening at national level, they become the intermediate board used to deal with the Scottish government. Well they basically cascade down both information, development and funding opportunities etc." [Interviewee 6]	
	"the volunteer services they've put the odd volunteer driver our way, they helped us get a trustee once" [Interviewee 8]	
	"NHS innovations, they've helped me with putting me in touch with the right people and networkingat a later date if I need some pro bono work then obviously they can come on board in a more concrete way." [Interviewee 22]	

8.3.1.1 Access to new markets

The first theme concerns relationships with external organisations that enable the social enterprise to interact with potential markets. The ability to assess new markets appears to be a re-occurring weakness of social enterprises who are fully aware of the needs of society but struggle to fully comprehend and initiate suitable actions to analyse the opportunities this presents:

marketing strategy isn't the most important thing for us, the most important thing for us is to work out what people want, and deliver it. If you can't do that bit, you haven't got a business at all. The competence we don't have is...how you scale that up into a marketing strategy...I think understanding what people want and trying to deliver it as much as you can is the most important thing. But our biggest gap is we don't have enough of those people and we can't scale it.

[Interviewee 30]

The key skills social enterprises require are assessment skills and financial competence to evaluate socially innovative opportunities. This a challenge for social enterprises who lack the market analysis skills; assessing the value and ways to fund such opportunities appear to be a weakness. Social enterprises understand that they must overcome this apparent weakness and gain skills similar to those found in commercial organisations, however they are also aware that for a social enterprise, resources to analyse the market and conduct market research are not as readily available or as easy to achieve:

So, we need all the tools of a commercial organisation, and one of the things is very obviously lacking, is our marketing and communications ability...it's knowing how to promote, market and reach the different market segments that we want to reach to offer services and sell things to. But we're learning. We're getting there slowly. [Interviewee 7]

Subsequently, social enterprises take several paths in their attempts to solve this. Some are able to seek external organisations and authorities that provide such information at a low cost or where possible, none at all. In rare cases, a particular interviewee said that they are able to afford a specialist consultancy as a market analyst for over 15 years (Interviewee 30). Nonetheless, the majority are reliant on exploiting social networking (e.g. Twitter) and media such as forums and blogs (Interviewee 3), or signing up for e-mail notifications in order to overcome resource, namely financial, constraints. The interviewee below elaborates some of the varied approaches adopted by the social enterprise to keep abreast of current trends and also anticipate forthcoming market opportunities:

my role...is facing the external side of things....networks...listening to people, but a lot of things now are through the Internet in terms of user discussion

groups...access to think tanks...mainly through internet and digital media...Actually including...futurist type organisations those sort of bodies...knowing what's going on now is important, but given what we're trying to do, also trying to be aware of what's likely to happen in ten, twenty years' time is also important so, trying to keep tabs on the entities who are exploring or doing that.

[Interviewee 4]

With increasing accessibility to social networking and social media in recent years and the advances in technology, many social enterprises are able to exploit these technologies and social platforms to gain market information with ease. However, there are still some social enterprises that value the personal approaches of engaging with the market directly and networking in person and at an individual level:

I don't do that many conferences, I'm much more...one to one networking...the teacup or the mug is more my weapon of choice. It's going to get to know people one to one...try to get to know the right people and then maintain relationships...working through them to other networks and finding out things that way, rather than conferences or indeed pay market analysts.

[Interviewee 4]

Furthermore, it is evident that attending traditional networking activities may conflict with the social objectives of a social enterprise in terms of costs, especially when considering the use of limited financial resources. Even though they appreciate that conferences and conventional events that promote networking may be helpful due to high costs, social enterprises deem it more beneficial to invest the conference fee directly into social objective-related activities (e.g. Interviewee 4 as cited above). Meanwhile, other social enterprises attempt to find solutions in-house or through other ways to access new markets more economically, particularly when financial resources are limited. These include trying to assess the market via contact with customers and consumers, conducting small-scale informal market research:

there are fairly well organised networks of parents of disabled children, so...to find out what people want is to go to those groups and say...'if you were to fill out a blank piece of paper what would you want?'...it's not particularly effective in so far as you [only] got the views of the people who can turn up to meetings, but, so you get a subset of the market. We know that it's not scientific, it isn't valid in the sense that it's not a full picture of what the market looks but it's those sorts of things that we are doing at the moment, which is in a sense the best we could do in a situation where no one's giving us the resources to do anything else.

[Interviewee 30]

Another solution adopted by some social enterprises to address this weakness in adequately assessing the market is to make changes internally to the organisation, by means of broadening the range of backgrounds of employees within the organisation. Having diverse individuals helps the organisation to scan the sections of the market that is most familiar to the individual; thus by broadening the diversity, it is assumed that the market will be scanned more thoroughly. In one particular instance, the importance of universities was highlighted as a bonus for extra support:

It's important to have [universities and professional associations] at both stages [of social innovation]. It's good to have conversations at the beginning...suss out what's going on elsewhere and what other people are doing and gain more knowledge...do your plans and then you actually go to implement it.

[Interviewee 5]

8.3.1.2 Access new stakeholders

Accessing new stakeholders relates to interactions with potential stakeholders of the socially innovative activities social enterprises anticipate undertaking. Social enterprises are aware of the importance and potential of relationships and are always "looking at other kind of partnerships, perhaps not in the same line of work but sort of the same sector" (Interviewee 25) to enhance the organisation by involving "different people who will bring a different stimulus or a different prompt in to help people to just think in a different way" (Interviewee 4).

Social enterprises also look for a wide range of organisation types from those in complementary and also diverse backgrounds. These could also include organisations from completely different perspectives such as universities and research bodies:

we've deliberately actively tried to engage with bodies, like local universities,... universities and bodies like think thanks, think and do tanks, places like the design council bodies also which apparently have very little to do with what we do, but personally I think that's really important as a way of generating new ways of looking at things. If we were looking at criminal justice for example... I'm not likely to find much innovation if all I'm doing is talking to prisoners in the probation service. ...An initial discussion that we're having now with the European Space Agency [is] about the relevance of social innovation to what they do with space technology. Now on the surface, they have no link whatsoever, but there might be some interesting stuff to do and stuff to learn.

[Interviewee 4]

Engaging diverse stakeholders potentially would not only open new markets, it could also enable scaling up of innovations at a later stage. In addition to developing linkages with organisations in a range of sectors and research bodies, social enterprises are also keen to keep themselves exposed to influential networks, such as professional or industrial associations and authorities, "because they're usually...at the forefront of how to get things to change...to bring out change within" (Interviewee 5). By keeping themselves at the forefront of the market or sector, social enterprises will be able to detect societal needs better (as highlighted by Interviewee 3 shown in Table 8.3). This suggests that seeking to form diverse linkages enhances the social enterprise's ability to respond quickly and effectively to changes in the operating environment.

8.3.1.3 Access new communities

External connections with community groups or partners that allow access to the community assist social enterprises in addressing unmet social needs, especially for those in health or education related sectors. These links tended to be informal and part of networking opportunities, involving groups that are directly related to the social enterprise's activities. These relationships provide information on the communities upon which the social enterprise impacts. Using this information and input from these groups influences the direction of the organisation in seeking and seizing opportunities while helping validate its actions:

we do have an advisory council with key stakeholders from the community, so we have young people on it and parents, and volunteers and a member of staff... somebody from schools, GP...people who are in our world. And that advisory council feeds into the Board...that challenges the Board to think in different ways. [Interviewee 14]

Moreover, apart from direct access to communities, other related resources could also be available through these connections and community group networking events, such as volunteers and expertise, which are useful for the second stage of the social innovation process. These relationships are also a means to reassure the social enterprise that it has not lost sight of its ultimate social objectives in the pursuit of sustainability and social innovation.

8.3.1.4 Exploit opportunities

It is recognised that in order to create social innovation, relationships with external links are important to fully exploit the opportunities presented. These relationships support social innovation by helping social enterprises overcome constraints and enable access to resources that would otherwise be difficult to obtain. Working jointly with other organisations increases the potential of the activity by engaging those "who can contribute to it or enable that to happen or facilitate it are particularly important" (Interviewee 4). The interactions between organisations in exploiting opportunities can be both formal and informal – both through informal or personal contacts, and through official collaborations:

getting people on board means that there are more opportunities for us to engage in that sort of activity probably the area that we most want to develop and we recognised the benefits it would do the company is some partnership building; we see a real potential in that in terms of how we can grow as an organisation, and also how we can better penetrate the market

[Interviewee 25]

Some enterprises are adamant about undertaking activities with others rather than doing it alone. As Interviewee 13 explains, their reason for maintaining a number of partnerships is because "we almost never do anything alone. We do it with another organisation" (Interviewee 13).

The organisations tend to be other social enterprises and organisations in similar industries and with like minds, since they tend to be more familiar and understand the nature of social enterprises better, and therefore often appear more helpful than conventional organisations:

if you work with other social enterprises, you're working with, on the whole, with like minded people... if I [was]...looking for financial investments from a social/socially innovative investment company, then I would expect to be able to go to them and say "this is my idea, this is how we want it to run, is this something you support?" and for them to be pretty quick off the mark in terms of deciding that...you wouldn't necessarily get that with a traditional funding store [Interviewee 3]

Partnership working has many benefits including risk-sharing and resource-sharing. Such linkages also support the flow of knowledge within the partnership, assisting the growth of the social enterprise:

So it's seizing opportunities, I think a bit of courage, networking, sharing the exposure to risk with others, so working as part of a trade federation, trade organisation,... And then by sharing the load and sharing the risk, and sharing the venture, you know you don't make as much money, but, you support one another

and encourage one another and do things together! And I think that's a very successful way of growing!

[Interviewee 19]

Moreover, not only are resources and risks shared, it became apparent that fundraising is easier and more accessible when done in partnerships with other social enterprises in the same sector (Interviewee 3): "We also work to fundraise jointly with other social enterprise businesses in the criminal justice sector". As funding and resources are usually difficult to obtain, social enterprises endeavour to support each other; smaller social enterprises in particular appear to struggle most. Social enterprises or similar organisations that are considerably larger in size or more established are able to offer pro bono work and help:

we really are a help giver in the centre here, we help all of our enterprises set up so I think you probably would say the majority of them wouldn't have set up without our help.

[Interviewee 16]

8.3.2 Scaling and Implementation

Table 8.5 introduces the findings concerning the second stage of social innovation and each of the three relationship drivers for 'scaling and implementing' presented as themes:

Table 8.5: Scaling and Implementation: Key Interview Quotes

Driver	Examples	
Build expertise	"we met the Chief executive of [Company] he has offered some of usmentorshipand also somebodyto work within our company for freefrom their business team. I think that would really help us." [Interviewee 14]	
	"they're not paid consultants, but they're experienced in their fields, it's justpeople that have worked in business who are giving their time freely" [Interviewee 3]	
	"for a project basis we might look to freelance artistswe look at people with that expertisethen there's the business stuffthings like employment lawaccountancywhereby obviously we don't have that in-house so wego outside for [Interviewee 21]	
	"[our in-house health professionals] will be trained to a certain levelbut if we're working with people who have very severe health issues, then we would work with cardiac nurses or others, particularly people with issues around metal health, so that we're able to create a partnership." [Interviewee 15]	
	"if we had somebody with experience in growing businesses rather than starting them that would be helpful the future of, particularly the care of the elderly, is integration between the NHS and the local authority social care, so we feel if we have some of that expertise on the board, then that would help us to develop ideas and pilots and ways of working that would put us ahead of the curve there. So those are the areas that we're looking to develop." [Interviewee 31]	

	"the adhoc [expertise] would be certain elements around the think thanks universities, facilitators those sorts of people in terms of our innovation process". [Interviewee 4]
Develop new knowledge	"In terms of proof of conceptwhat's important there would be things like access to research, sobodies like universities and think tanks become very useful." [Interviewee 4]
	"being a small company, you can't bear the cost of having so many individuals working full time for the organisation therefore your partnerships and your links with external people become really important and bringing in extra knowledge" [Interviewee 5]
	"where we lack expertise we seek itin other organisations;with universities for technical, orresearch based,[and] networking groupsWe also will go to similar organisations" [Interviewee 3]
	"We also visit competitors[s]to assess what they're deliveringwe would come back and we could define and explain why our model is so much more conducive forhigh qualitywe were actually travelling with the competing nurseries and it's a knowledge share as a result." [Interviewee 26]
	"I think specialist knowledge is really the key to it. So making sure that we are actually asking the right questions to the right people and getting the right information, so either justify what we're doing or supporting us in the development of what we're doing." [Interviewee 7]
Gain new skills	"to run an organisation on volunteers is a very tricky thing so we'reafter volunteers and or trustees with these skills[using these relationships]" [Interviewee 7]
	"if I was looking for support, you'd be looking at the intermediary organisations who've delivered training and support" [Interviewee 6]
	"things likemeasuring the social impact or social value of what you deliverhow to market the products or services that you're offering how to project manage, the business and the development of it" [Interviewee 19]
	"We had a lot of inadequaciesa lot of it was [solved] through the Scottish Enterprise, we've done a lot of traininga chief exec course with the Scottish enterprisesenior management courses." [Interviewee 6]

8.3.2.1 Build expertise

In order to implement and scale up social innovations, social enterprise are aware of the need to seek support in expert areas where skills and knowledge are out of their "normal area of working" (Interviewee 7) in both social and economic aspects of the organisation. This is conveyed by Interviewee 3: "where we lack expertise we seek it, experience and expertise in other organisations; so we work with universities...maybe technical, or it may be research based". Thus, they actively try and engage with external links to build expertise within the social enterprise often via consultants, volunteers, secondments and pro bono work from larger private organisations:

we absolutely do need people with specialist knowledge, we would be never able to have that in house...for certain projects we are 100% reliant on accessing outside help, if we can do that on reduced cost or no cost through sort of people either finding pro bono expertise support or volunteering, fantastic!

[Interviewee 7]

Whilst this dependency on volunteers and pro bono work for extra support is apparent throughout all stages of a socially innovative activity, it is highlighted that it is particularly important for the later stages where implementation is on a larger scale:

[for] the bigger level projects, you got to make sure that you're doing things on a very informed basis, for that you're talking about consultants and advisors...you have to tap into those who really know, have the knowledge and know what they're doing.

Social enterprises tend to seek external organisations and links for support, expertise and resources on an ad hoc or project basis. For example, in health and social care, expertise is needed for specialised areas or cases; "if there's more contentious or complex work, then that's maybe where an associate [consultant] comes in to deliver that higher level expertise as we develop our internal consultants" (Interviewee 25).

Moreover, it is clear from the interviewees that some resources are hard to come by especially for smaller social enterprises, and particularly for financial reasons, as Interviewee 10 states, "we could get outside expertise but that's likely to have a cost to it". Professional and/or industrial associations advise social enterprises to develop relationships with organisations that provide expertise, recognising that these external linkages enable growth:

it was [our]...relationship with social business trust who just said that if you want to grow at your rate then you do need to have the experts, but we don't currently have that resource in house.

[Interviewee 26]

In some, more fortunate cases there is evidence that larger or more established social enterprises with wider networks could access expertise easier:

in particular areas of specialism and expertise and background that we can draw on some consultants which we can particularly tailor to certain organisations. So if there's a particular activity that's going to happen in an organisation of a certain type, we'll look to match that person to it... and there's also drawing on particular specialisms that are not particularly affordable to the not-for-profit sector ordinarily, but we can draw in.

[Interviewee 25]

The expertise needed is not limited to that required for the social value creation. Occasionally specific business consultants are engaged for finance and accountancy (Interviewee 1 and 21), legal expertise (Interviewee 28), general advice and particularly for scaling up and growing the organisation (Interviewee 7, 19 and 31). Whilst mainly the external organisations would be consultants and umbrella organisations, some social enterprises would also seek the expertise of research bodies for the social innovation aspect (Interviewee 3, 4 and 19).

8.3.2.2 Develop new knowledge

As evident from the survey responses (presented earlier in Table 7.2), the majority of social enterprises are micro-companies with very few employees. This presents even more challenges when it comes to resources available internally within the organisation. Consequently, social enterprises become heavily reliant on partnerships and external links to access these resources:

being a small company you can't bear the cost of having so many individuals working full time for the organisation therefore your partnerships and your links with external people become really important and bringing in extra knowledge and things.

[Interviewee 5]

The importance of relationships that provide social enterprises with exposure to new knowledge and support the development of knowledge is emphasised, particularly during the stage of scaling up social innovation:

I think for innovation, most of the resources for innovation largely is about networks...about relationships with the right individuals and the engagement with other areas that generate the thinking. So I think innovation is mainly about people...for the delivery or the development of innovative ideas into delivery...the difficulty's finding people and resources in terms of the proof of concept and the marketisation, scaling-up element.

[Interviewee 4]

The organisations that are typically sought for knowledge are universities, research bodies, and think tanks that help social enterprises with capitalising their social value-making activities. Universities provide an environment to "share expertise…and knowledge" (Interviewee 21) and help social enterprises to be "innovative…bringing together leaders of organisations involved in the broad category of sustainab[ility]" (Interviewee 16) but also reinforce social enterprises with research. As Interviewee 13 explains, relationships with universities "can grow and form the academic research but also strengthen…our…own work…in terms of evidence and impact that we have".

Social enterprises tend to seek knowledge predominantly associated with social valuemaking as opposed to business related information. Research bodies and similar institutions are used to gain new knowledge and a deeper understanding of the impact of activities. Many are seeking ways to measure, justify and strengthen their social impact as aforementioned:

universities...there's an area that I'm very keen to develop which is around sort of measuring our impact. It's all very well doing lots of stuff and we can measure how much stuff we do, but the real crucial question...is 'so what?'... I find it quite complex...it's understanding how we can measure what we do, the effect of what we do on our communities...so with the wealth of having two universities in the city, I think that the wealth of very intelligent expert people within those institutions could be very good.

[Interviewee 7]

This can be particularly beneficial for social enterprises pursuing funding opportunities, and subsequently, partnerships with universities and research bodies enable social enterprises to create portfolios of evidence to support their bids:

[the research was on] the impact of our work on health and wellbeing...it can grow and form the academic research, but also strengthen...our own work...in terms of evidence and the impact we have...which is useful for funders.

[Interviewee 13]

Meanwhile, some social enterprises stress the need to have relationships with organisations in the same sector to increase knowledge as "my experience is that organisations in the same industry are very important so we can understand, we can learn from [them]" (Interviewee 7). The importance of monitoring and creating knowledge exchanges with organisations in the same industry, specifically, competitors is also highlighted (Interviewee 26).

8.3.2.3 Gaining skills

This theme deals with relationships with organisations that help to support the development of new skills through training, support agencies and industrial or professional associations, and making use of consultants and mentors to help with the internal resources of social enterprises. As mentioned in the thesis, social enterprises lie within the 'Hybridity Spectrum' defined by Alter (2007), and thus the must address their concern for the 'double bottom line' (Emerson and Twersky, 1996) by adopting a business approach of market mechanisms and strategies to create both social and economic value (Alter, 2007). It is particularly evident from the interviews that social enterprises are internally challenged by requirement of commercial proficiencies in order to sustain the business. One interviewee elaborates the challenges posed by this duality:

I see people who will set up a...small social enterprise to deliver a service. They do it from their heart, they're passionate about commitment and doing things, but actually they sometimes lack ...the competence and the business rigor to make it happen. And when you talk to people about strategy, business planning, risk assessment, that's not what interests them, they're not interesting profit and loss, they're not interested in balance sheets, they're interested in doing good things. And the danger is, because they can't demonstrate the level of competence and the business rigour, that they become un-investable.

[Interviewee 15]

Through the interviews, it can be seen that the majority of social enterprises tend to have particular weaknesses in terms of skills and resources that are business orientated, which are not only important in sustaining the social enterprise but to help it develop further. The areas that are mentioned tend to be around generic management issues such as leadership training, finance-related skills and particularly marketing skills. Marketing is an aspect that frequently re-occurs since when interviewees are asked what area, in terms of skills development, would be most helpful, they highlight the "key things that would probably develop the business would be marketing" (Interviewee 20). Interviewee 26 is an example where social enterprises use external training to support the growth of the organisation in these areas:

we've got a lot of training courses currently to develop the leadership skills of the managers because they have been asked to take on more responsibility, more activity as part of growing, so obviously we need to support them in that transition. [Interviewee 26]

The types of external organisations social enterprises seek are generally larger organisations or agencies that are experienced in providing professional training and development. These tend to be generic, non-sector-specific organisations that can support social enterprises in developing their business skills, professional associations that specifically help enterprises and entrepreneurs, such as the Scottish Enterprise, Scotland's main economic, innovation and investment agency. For more specific areas, consultants and other social entrepreneurs or organisations from the same industry are sought for extra skills that would further develop the value-creation by the social enterprise.

However, since many social enterprises are constrained in terms of financial resources and time, some organisations make use of their external links, particularly "towards the end…the planning and implementation stage, it's about really honing in on what skills we can use off people" (Interviewee 5). Outsourcing particular skills rather than developing

the skills in-house through training prevent using valuable resources that could be allocated elsewhere, (Interviewee 5); "looking at general consultancy firms...it wouldn't be an advantage for us to spend time...on building those skills, it would make more sense to bring someone on board for that certain project who can help".

8.4 <u>Summary of Interview Findings</u>

It is evident from the interviews that external links with organisations and individuals, and also personal contacts play a crucial role for the social enterprise. Two key themes are apparent throughout the interviews relating to each stage of the social innovation process: the importance of basic business acumen in the seizing and selection phase, and the need to acquire or develop extra expertise, skills and knowledge through external links in the scaling and implementation stage.

Through the majority of interviews, it is obvious that there is an underlying issue where many social enterprises, particularly small organisations with few employees or employees that are specialised in certain fields, lack knowledge and skills in business management. This may be basic skills in accounting and more prominently, the marketing aspect. Whilst the interviewees are predominantly aware of the need for business acumen in a 'hybrid organisation' such as the social enterprise, many struggle or have struggled with this area. Without knowledge of business-related skills, interviewees have expressed their difficulty in setting up the social enterprise and sustaining it. Many social entrepreneurs look towards training courses for acquiring basic business management knowledge and skills. In some cases, bigger and more established social enterprises or industrial or professional associations are willing to help with this training or offer advice.

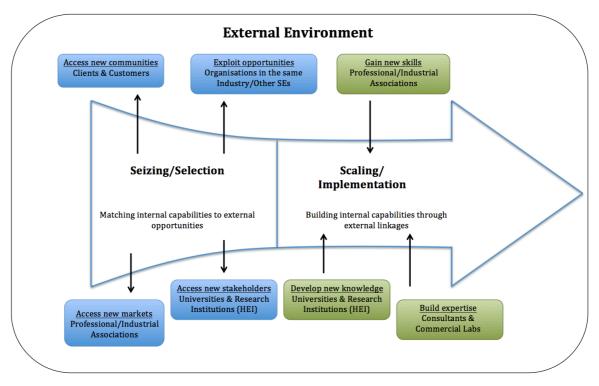
The lack of ability to market the social enterprise and perform appropriate market research hinders the organisation from accessing opportunities and once those opportunities are available, the need to value and assess them is crucial in the process of seizing the right opportunities and executing them. Moreover, such skills are vital when the organisation is looking to scale-up their activities or implement larger, riskier projects. With the issue of financial difficulties and constraints evident in many cases, many social enterprises are unable to employ someone who is assigned to market research or reach out to external organisations. However, through the availability and wide use of social platforms that reach an array of audiences, social enterprises are able to utilise "free" social media platforms to gain information about the industry, community and market they operate in. In situations where social media does not provide the right information, and market research is required on the immediate community in which organisation operates, some social enterprises take it upon themselves to distribute questionnaires or to survey the stakeholders in person.

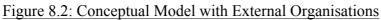
In the second stage of the innovation process, social enterprises are aware of the need to access expertise, knowledge and skills in areas that are generally more niche, specific to projects or areas that are more advanced to their existing competences. In these cases, many organisations seek external links that can provide such expertise, deal with specific issues or can provide expert information such as consultants, research institutions and universities. Where financial constraints are too high, social enterprises often call upon personal contacts for favours and where possible, try to access *pro bono* help. Such contacts can fill in the gaps to areas where the social enterprise has no or little existing knowledge or skills, and these linkages tend to be used on project-based terms as opposed to long-term arrangements. Conversely, relationships developed earlier on in the social innovation process may be long-term or linkages that are kept in contact throughout the operation of the social enterprises.

One of the main issues confronting social enterprises that has been repeatedly emphasised relates to the problems financial constraints bring. Without the ability to employ more fulltime employees, to afford to seek professional expertise or attend vital networking events, many are forced to rely on volunteers, internships and *pro bono* work. Some social enterprises receive help from established social enterprises or industrial, professional associations who can provide services free of charge in helping these organisations start up, or solve difficult situations. These larger or more established enterprises and organisations play a vital role in supporting struggling organisations, guiding less experienced social enterprises when financial resources are low. In some cases, interviewees have stated that these organisations not only provided advice and guidance but temporary human resources also.

In conclusion it is evident that relationships with external organisations and individuals play a vital role in the development and sustaining of the social enterprise in undertaking social innovative activities. Linkages with various organisations allow support in different areas throughout the process of social innovation. Similar organisations may strengthen the social enterprise's ability to seize an opportunity, whilst linkages that provide more diverse or advance expertise will develop the social enterprise's ability to scale-up or implement more or bigger innovative activities. However, it must be noted that many of the social enterprises are reliant on services and resources that are free of charge or less costly. Thus, resources such as free guidance and training from professional associations and established social enterprises, expertise and knowledge from personal contacts, *pro bono* work, and also volunteers to help in any way possible, appear to be fundamental to the social innovation process.

With respect to the conceptual model, and the relationships drivers, the researcher aimed to link data from the interview to the following list of organisation categories (taken from CIS6) with each relationships driver: (a) suppliers; (b) organisations in the same industry; (c) consultants/commercial labs; (d) universities or other Higher Education Institutions (HEI); (e) professional/industrial associations and; (f) clients/customers. Figure 8.2 below presents these categories plotted on the original conceptual model in attempt to illustrate suggestions of when these organisations typically tend to be involved in the process of social innovation.





Examining the conceptual model above (Figure 8.2) it illustrates that it is possible for some of the organisations to be involved in both stages of social innovation. For instance, professional and industrial associations are engaged with social enterprises for access to new markets and later for the upgrading and gaining of new skills. Similarly, universities and research institutions can assist in the accessing new stakeholders for seizing innovative opportunities as well as the development of new knowledge in the latter half of the process. In some cases other social enterprises, particularly more established social enterprises can provide assistance in gaining new skills and/or building expertise in addition to exploiting opportunities as shown in the diagram. Moreover, due to the nature of social enterprises being predominantly driven by a social goal, dialogue between the enterprise and the clients or customers tends to be on-going, throughout the process, but is significantly useful for improving capabilities to access new communities. Please note that the category 'suppliers' in this study refer to organisations that supply "equipment, materials, components, software or services" (OECD, 2005: 81). It is not illustrated on the conceptual model in Figure 8.2 as many social enterprises do not seem to work with suppliers for the pursuit of social innovation and this category of organisation did not appear to have a distinct place in which it fell.

It is evident that social enterprises are engaging with a highly diverse 'ecosystem' and community of organisations, working with external linkages to acquire, develop and

exploit capabilities in identifying and seizing socially innovative opportunities and then implementing and scaling these social innovations. This aligns with Teece's view on the importance of including all types of institutions and individuals when building dynamic capabilities. Teece argues that this 'ecosystem' consists of "complementors, suppliers, regulatory authorities, standard-setting bodies, the judiciary, and educational and research institutions" (Teece, 2007: 1325), which impacts and influences the enterprise and its stakeholders. The importance of organisational diversity is also in line with Phillips *et al.* (2006), who suggest working closely with collaborators while exploring 'strategic dalliances' that could potentially exploit discontinuous innovations. The range of organisations highlighted in prior literature is similar to that in the findings, and that it is apparent that social enterprises are using such diverse linkages to overcome resource constraints and harness co-creation in a similar vein to 'open innovation' by utilising "purposive inflows and outflows of knowledge to accelerate internal innovation" (Chesbrough *et al.*, 2006: 1) and to scale up their activities and increase their impact (Lyon, 2012).

8.5 <u>Chapter Summary</u>

The interview findings have been presented thematically in this chapter. Aligning with the conceptual framework, themes were related to the stages of social innovation 'seizing and selection' and 'scaling and implementation'. Within these two sections, individual themes corresponding to each of the seven relationship drivers were presented. It is evident that resource constraints form one of the main problems and that social enterprises are seeking external support from a diverse range of organisations when undertaking social innovation. Other themes emerging from these findings include evidence of assistance given by larger or umbrella organisations and associations and the role social media platforms play in networking. The researcher offers a synthesis of the findings drawing from both stages of the data collection, quantitative and qualitative, in the following chapter.

9 Discussion and Conclusions

9.1 Introduction

In this chapter, the researcher presents a discussion that synthesises both the quantitative and qualitative findings. Links to existing academic literature are presented, highlighting which of the hypotheses are address and whether any warrant further insight. The chapter is divided into two key sections. The first section contains two inter-related themes: findings concerning the stages of the social innovation process, and subsequently, insights regarding the relationship drivers. The proposed hypotheses are presented and discussed. The second section consists of other key elements that have emerged from the findings, including further understanding on the nature of social innovation and the management of capabilities involved in the process of social innovation. In this section the discussion links the drivers with examples of the types of organisations social enterprises to seek to develop engage in specific capability development. Building on this, the final section draws together the theoretical frameworks and the empirical findings to highlight the thesis's contributions to existing literature. To conclude, the limitations and suggestions for a future research agenda are offered.

9.2 Discussion

9.2.1 The Stages of Social Innovation

Following the literature review, the study presented a conceptual framework whereby social innovation is proposed as a two-stage process, in-line with the concept offered by Nicholls and Murdock (2012). Relationship drivers were integrated into the two stages following the notions of dynamic capabilities (Helfat *et al.*, 2007; Teece, 2007; Teece *et al.*, 1997) and its role in fostering innovation. From this, it is conceptualised that the relationship drivers, representing the motive(s) underpinning the engagement and development of links with external organisations, have distinctive characteristics in their role in fostering social innovation, and therefore would fall into distinct stages in the process of social innovation.

The stages of social innovation were revealed by performing CATPCA on the quantitative data collected from the respondents to capture the drivers for relationships with external organisations. The relationships drivers were found to fall in two distinct stages as

proposed in the conceptual framework and are illustrated in the conceptual model. This reinforced the notion that relationships with organisations supported the harnessing of dynamic capabilities and that these dynamic capabilities (Teece, 2007; Teece *et al.*, 1997) fell into two stages of different functions (Helfat *et al.*, 2007), which have been consequently named 'seizing and selection', and 'scaling and implementation' in the conceptual model. Moreover, the results provide support that the conceptual model aligns well with the two-stage framework of social innovation as advocated by Nicholls and Murdock (2012), which splits innovation into the invention stage and the implementation stage. Therefore, it can be concluded that results have found that the conceptual model is representative of the social innovation process.

9.2.1.1 Relationship Drivers of Social Innovation

Building on the conceptual model, this section revisits the two proposed hypotheses and discusses the findings relating to themes representing the stages of the social innovation process and the drivers of relationships that foster social innovation. The following two hypotheses were offered:

- H1: Relationships by social enterprises with other organizations to match internal capabilities with external opportunities (seizing/selection) that are positively related to social innovation performance.
- H2: Relationships by social enterprises with other organizations build internal capabilities (scaling/ implementation) that are positively related to social innovation performance.

In testing these hypotheses, this study has found contradicting results between the quantitative and qualitative data, arising from the survey statistics and interviews.

Relating to Hypothesis One, the review of existing literature suggested that social enterprises need support through external relationships to keep abreast of developments in the exogenous environment (e.g. Chalmers, 2013; Mulgan, 2006), to seize socially innovative opportunities. As presented in Chapter Seven, this hypothesis was supported.

It is emphasised that the impeding factors are the number of barriers these socially innovating organisations face (aligning with Chalmers, 2013), perhaps the most critical of

which is resource constraints. Thus social enterprises are reliant on accessing external resources in order to scale up their activities and outcomes as noted by Lyon (2012). In this vein, Hypothesis Two was offered.

In examining the regression results, this hypothesis did not hold. However, it was evident from the interviews that second-stage relationship drivers were prominent and the resource constraints extend beyond financial difficulties to also include specific knowledge in areas more advanced than faced before, expertise and technical skill to improve existing skills and knowledge; aspects which relates to stage two of the social innovation process. This may suggest that social enterprises are in tune with social needs that may benefit from the introduction of social innovations, however social enterprises appear to be lacking the necessary knowledge and expertise to transform the opportunities into social innovations and look to external organisations to support them during this transferring, transforming and implementing process. Therefore, with respect to social innovation, once an opportunity has been identified, it is implemented and scaled-up, enabling it to provide greater social benefit and achieve scale economies, supporting the works of Murphy *et al.* (2012) and Webb *et al.* (2010). Interviews highlighted that it is at this particular stage, social enterprises are reliant on external relationships to support working at this scale by providing and developing the necessary capabilities.

Nevertheless, this was not supported in the results of the regression where significance was present only in the first stage. The emerging narrative indicates that linkages are mainly used to identify opportunities. While social enterprises are aware that they need to build external linkages for resource acquisition, they are not able to do this and this could explain why H2 was not supported, as social enterprises have not yet exploited stage two linkages they are trying to develop. This may be due to major struggles with basic business capabilities and also financial constraints looming over the majority of social enterprises, which confirms the work of Chalmers (2013). When this notion was further investigated, business acumen seemed to be a major underlying problematic factor to the running of the social enterprise, capabilities accounted for in the seizing and selection (start) of the social innovation process.

Whilst expertise, skills and knowledge were indeed critical elements, interviewees would reiterate the need to ensure that the business element of the social enterprise was stable.

Many of the interviewees revealed that they had no prior knowledge or experience with starting and running a social enterprise, and were not trained in business management or basic accounting. Furthermore, in order to solve this, the interviews revealed that social enterprises looked for help from professional associations who may provide free advice or even training courses, and those who were fortunate were able to have *pro* bono assistance or help from larger organisations. This supports the notion Phills *et al.* (2008) explained of non-profit organisations seeking for assistance in management and entrepreneurship from the commercial sector. Particularly, smaller social enterprises that lacked resources were benefiting from more established organisations, in their pursuit of social innovation as noted by Mulgan *et al.* (2007).

Without the daily operations and the business backbone of the social enterprise functioning efficiently, it was not possible for the social enterprise to seek other resources. The marketing function was a key topic surfacing from interviews. Interviewees highlighted the importance to not only understand the market, which many are able to do so, but to subsequently assess the value and the risk in the opportunities that lie open to the social enterprise. It is the latter that many social enterprises struggle with and consequently these social enterprises are unable to fully maximise these opportunities or begin thinking about the resources needed for the implementation of socially innovative activities.

Despite what appears to be the importance of relationship drivers in the first stage of social innovation having a greater positive effect on perceived innovativeness, outweighing the factors in the second stage, it cannot be denied that the latter are also important through the interviewees' narratives. The fact that business competences such as marketing, and risk assessment skills are so significantly highlighted throughout, suggests that social enterprises are unable to move forward to tackle other capabilities that required developing through external relationships, such as knowledge and expertise. This may be a reason as to why results have shown significance in the seizing and selection stage, which included the relationships drivers that aimed to develop relationships with organisations that supported access to new markets and exploiting opportunities (e.g. resource- and risk-sharing). Nonetheless in this instance, the results indicate that Hypothesis Two was not supported, but the interviews have brought to light contradicting results with the interviews and exploiting the complexities that social enterprises are unable to process, indicating the complexities that social enterprises are specified.

face when they lack internal resources in their pursuit of social innovation throughout the process.

9.2.2 Emerging Themes

The following sections highlight some other key sub-themes that have surfaced through the data, particularly in the interviews. These included the cross-sectoral nature of social enterprises and also the problems that they face, such as the need to have sufficient business as well as technical acumen. Through the interviews, evidence supporting the notion of established organisations assisting smaller organisations was found and that predominantly, social enterprises were embedded amongst a 'network' of diverse organisations.

9.2.2.1 Sectors

Comparative studies of social enterprises in different countries have found that the dominant sectors within which social enterprises operate in different nations often relate to the area's or country's specific socio-economic strengths (Kerlin, 2009). This suggests that social innovators are conscious of the resources available to support and maintain innovative projects and also have an understanding of the environment's culture (Kerlin, 2012). In this case, the findings here identify a strong bias towards health and social care, education and training, and environment sectors within the UK. This suggests not only availability of resources in these sectors but also a culture that is supportive of endeavours that aim to enhance the quality of life, particularly through addressing health and social needs and the provision of education and training, sectors that the UK has traditionally been strong in.

With respect to the regression, the lack of significance in the effect of sectors on social innovation may be due to the nature of social enterprises often operating cross sectors, thus the appearance of mildly high multi-collinearity in one case. Findings from the interviews also suggest that many social enterprises work with partners that are not necessarily in their own field of expertise or market sector which provides evidence supporting the notion that indeed these organisations are operating across sectoral boundaries and within a network of actors (Phills *et al.*, 2008), and are dependent on collaboration between sectors (Edwards-Schachter *et al.*, 2012). For example, some social enterprises worked with

universities who also have links with organisations from many different sectors. The diversity of partners highlighted by interviewees aligns with the existing literature. Coombs and Metcalfe (2002) who propose the notion of a 'cross-firm' capabilities concept, put forward the view that social innovations are reliant upon collective learning between a range of actors that transcend sectoral boundaries, thus giving rise to new combinations of capabilities. Organisation diversity and the skills of workers and volunteers are emphasised by Coombs and Metcalfe (2002), and it is evident from the interviews that this is also the case in social enterprises.

Furthermore, not only do relationships transcend and cross sectoral boundaries, evidence from the data show that they include a range of stakeholders: professional and industrial associations and 'umbrella organisations', councils, universities and research institutions, consultants, *pro bono* experts and volunteers. This supports the notion put forward by Phills *et al.* (2008) as the 'cross fertilisation' or 'cross-pollination' between multi-stakeholders of diverse organisations and sectors and the erosion of walls between the three sectors of non-profits, governmental and business sectors in order to address the complexity of global social problems. It also suggests evidence of "the integration of private capital with public and philanthropic support" (*ibid.*: 40), which leads towards the emergence of social innovations. In a few instances in the interviews, interviewees have directly indicated that they purposely look for organisations that are diverse and out-of-theordinary partnerships to facilitate social innovation. Moreover some cases even explicitly mention the need for diverse external linkages for scaling up projects and activities they are pursuing or implementing, thus supporting the view Lyon (2012) suggests through the study of innovative small firms.

9.2.2.2 Social Media Networking

Interviews suggest the underlying issue that there is no readily available network for their social enterprise to align to as social enterprises typically address distinct social goals in unique ways. In some ways this is consistent with the notion Lettice and Parekh (2010) who suggest some barriers caused by the hybrid nature of social organisations: "sometimes innovators struggle to identify which conventional networks to align with, as social innovations often span boundaries and do not neatly fit into a single category" (*ibid*.: 105). Subsequently, to overcome this implied barrier and to facilitate socially innovative

activities (as evident in Chalmers, 2013) many interviewees portray a pro-active approach to networking between different types of organisations and individuals. The advancement of social media has made it possible to do this at a lesser cost than attending conferences which may not be entirely relevant.

This finding is also consistent with a study of how social media fosters social innovation by Charalabidis *et al.* (2014) wherein the authors recognise that "[s]ocial innovation requires extensive networking, communication, and collaboration among various social actors" (*ibid.*: 225) and promotes the use of social media to enable intra-organisation knowledge exchange. Building on existing literature of how ICT supports innovation by improving the access, collection, accumulation and management of knowledge between innovative organisations and sectors, Charalabidis *et al.* also highlight how ICT "facilitates the combination of scientific and operational knowledge from different domains and areas" (*ibid.*: 226), an aspect known to be critical for innovation. The authors suggest the same approach to be applied for social innovation. Charalabidis *et al.* (2014) acknowledge that transfer of new diversely sourced external knowledge is an important driver for innovation when combined with relevant internal knowledge, and note that:

electronic networks can support and improve inter-organizational knowledge exchange and innovation collaborations (e.g., with suppliers, customers, universities, research centers, other firms, etc.), through which a firm can gain access to specialized external knowledge, which can be very useful for designing innovative products, services, and processes.

(*ibid*.: 226),

Charalabidis *et al.* (2014) note that whilst social media platforms can assist knowledge exchange at a low cost and provide the potential to disseminate to a wide audience, the authors conclude that it can also lead to a narrower audience of like-minded individuals that belong in the networks of the initiator, with the result of decreasing the diversity of information if they do not participate in a wide range of communities and it may not generate high detailed information.

In the thesis, evidence from the interviews suggests that when social media platforms do not suffice in providing relevant information as highlighted by Charalabidis *et al.* (2014), social enterprises revert to traditional approaches and actively contact organisations and individuals directly and in person. Although interviewees are aware that this method of approaching individuals in person may not yield information that may represent a wider

population of their consumers or customers, the interviewees believe that it can provide detailed insight.

9.2.2.3 Relationships with Organisations

Taking the original table of relationship drivers presented in Chapter Five and reiterated in Chapter Eight (the qualitative findings), additional insights have been included following findings from the interviews. These are presented relating to the two stages of the social innovation process, 'seizing and selection' (Table 9.1) and 'scaling and implementation' (Table 9.2) respectively.

Innovation Stage	Relationship Drivers	Description
Seizing and Selecting	Access new markets	Relationships with organisations that enable social enterprises to understand and access new market segments often through relationships with larger organisations that have their own marketing function.
	Access new stakeholders	The development of relationships with prospective key stakeholders such as public agencies, major think tanks, universities and governmental institutions.
	Access new communities	Relationships that support access to local communities through, for instance, local support groups or community action groups.
	Exploit opportunities	Development of relationships that support the pursuit of new opportunities that enables the sharing of risk through partnering with like-minded organisations, often other social enterprises and organisations in the same or similar sector(s).

Table 9.1: Organisations for Seizing and Selecting Innovative Opportunities

It is evident from the interviews that the relationships with external organisations in this stage of the social innovation process tend to be on a more regular basis as the social enterprises are constantly searching for new opportunities and keeping track of developments external to the organisation. Furthermore these linkages often provide support on generic or broader issues as opposed to specialist technical help. However, due to lack of resources or funding, social enterprises particularly struggle with assessing the market so that any opportunities detected could be appropriately valued and pursued.

Access New Markets This is one of the areas that is highlighted from the interviews that social enterprises struggle with the most. Social enterprises lack the resources of a commercial organisation to scan and search for new markets and conduct market research to keep abreast of advances. They are reliant on larger organisations such as professional or industrial associations to relay new market opportunities and related information to

them. They recognise the importance to network with organisations that are "well 'plugged in' to the market place" (Rothwell, 1991: 96) but these are often at a cost social enterprises cannot afford. With the available social networking platforms in this era, social enterprises are able to access and investigate new markets at lower costs and also to have direct contact to a wide range of people in the market and prospective markets, which supports Charalabidis *et al.* (2014). Additionally, social enterprises are also able detect new trends and to put forward or create ideas from this information to expand existing markets in a similar fashion to open innovation such as in the works of Chesbrough (2004) and Edwards-Schachter *et al.* (2012). In cases where social enterprises required suppliers, they were able to gain information through suppliers for changes in the market such as new products or services or consumer trends.

Access New Stakeholders Some social enterprises have indicated that they actively try to engage with diverse organisations in hope to widen their range of stakeholders and to increase socially innovative opportunities. These could be research projects with universities and research institutions examining the market that have access to organisations that seemingly have little relation to the social enterprise's activities, which results in a potentially wider scope of social innovation and impact, which is in line with the findings of Lyon (2012). Other organisations include working with other social enterprises that are similar but have operations in different areas of the same sector, or umbrella agencies/associations that keep the social enterprise at the forefront of the industry and in touch with various other links in different sectors.

Access New Communities As aforementioned, social enterprises have financial and resource constraints that make access to new markets and consumers very difficult. Social enterprises attempt to solve this by maintaining and seeking direct contact with the consumers and customers, and expanding the network from community networking. In some cases, such as in the social care sector, there are infrastructural or umbrella organisations that provide opportunities to network with community groups that the social enterprise could engage. This type of environment is very 'hands-on' and an active way to create a greater diversity of communities the social enterprise impacts on and opportunities for user-driven innovation and processes as advocated by Edwards-Schachter *et al.* (2012).

Exploit Opportunities To exploit opportunities, social enterprises tend to look for likeminded organisations to share risks and resources, and gain experience of working together on a project. These organisations are often similar organisations in the same sector or industry such as other social enterprises, and umbrella organisations. Such networks or relationships are often leveraged, helping the organisation to create sustainable competitiveness by continuous learning and shared benefits (Bessant *et al.*, 2003). Potential shared benefits include, sharing the learning experience, risk reduction and the transfer of ideas (*ibid.*). Consistent with Bessant *et al.* (2003), social enterprises seek to work with similar organisations, as there is a commonality of interest and share the same focus of delivering value to a particular group of customers and consumers. Working together improves this core process throughout the network and through increasing competition, the motivation to learn potentially increases (*ibid.*).

Volunteers and *pro bono* work were also mentioned in some cases where the social enterprise did not have the capacity to exploit the opportunity and simply could not afford extra employees or resources. Furthermore, these findings indicating resource- and risk-sharing to exploit opportunities through collaboration aligns with Dodgson (1991) who outlines the three main mutual benefits of partnerships as: increased scale and scope, shared costs and risk, and improved ability to deal with complexity.

The types of relationships built in the second stage of the social innovation process (Table 9.2) are predominantly project-based and for specialist, technical expertise with the exception of gaining skills in business acumen and management related training. Social enterprises seek proficient organisations that can upgrade internal capabilities to a more advanced level for the scaling and implementation of socially innovative activities, which aligns to Chalmers and Balan-Vnuk (2013). This also supports the notion by Westley *et al.* (2014) that organisations tend to need new resources and a set of complex skills, including resource mobilisation skills, for scaling up their activities for greater impact.

Innovation	Relationship	Description
Stage	Drivers	
Scaling and Implementation	Build	Building expertise within the social enterprise often via volunteers,
	expertise	secondments, consultants and pro bono work from larger private
		organisations.
	Develop new	Developing relationships that expose the social enterprise to new
	knowledge	knowledge e.g. universities, research bodies
	Gain new	Relationships that can support the development of new skills through
	skills	working with training, support agencies and industrial or professional
		associations.

Table 9.2: Organisations for Scaling and Implementing Social Innovation

Build Expertise Organisations sought for building technical expertise are consultants and sometimes *pro bono* work from larger organisations or association. These are generally project-based or short-term arrangements for the advancement of technical expertise or advice beyond the abilities the social enterprise has internally. These external linkages and organisations facilitate the scaling up of current socially innovative activities and to increase the capacity of the organisation. This type of relationship is reflected in the literature (Chalmers and Balan-Vnuk, 2013; Rothwell, 1991) where it is argued that external relationships with external expertise is critical for successfully innovative organisations (Rothwell, 1991) and is in line with the findings of Chalmers and Balan-Vnuk (2013) who found that not-for-profit organisations "often rely on co-developing innovations with more technically proficient partners" (*ibid.*: 805) and stressed that learning from partner and consultants as vital due to lack of resources to develop internal capabilities otherwise.

Develop New Knowledge It was found that many social enterprises sought universities and research institutions for technical knowledge and also to provide proofing/evidence and testing of their socially innovative activities, measuring the impact and data for reflection, improvement and scaling up. Other organisations included similar organisations in the industry and competitors, which supports the studies by Chalmers (2013; Chalmers and Balan-Vnuk, 2013) whereby the Chalmers concluded that socially innovative organisations should adapt their internal structures and strategic search activities to fully exploit externally created "valuable knowledge available through partnerships, competitors and the scientific research base" (Chalmers, 2013: 18).

Gain New Skills The skills that social enterprises required were both generic and technical skills, primarily business management, accounting and administrative skills, but also in specialist areas specifically for socially innovative activities. Social enterprises acquired skills from a diverse range including intermediaries, professional or industrial associations, volunteers and so on, in essence, any organisation or individual that they could learn from, preferably at a low cost. When working with suppliers or technicians, social enterprises were able to gain free training for the products they were being supplied with, especially for upgraded specialist equipment. These external arrangements were for the purpose of upgrading internal skills and to accumulate skills from various linkages (supporting the works of Teece, 2007; Branzei and Vertinsky, 2006) and also exposure to new knowledge and skills (aligning with Teece *et al.*, 1997) previously unknown to the social enterprise and tend to be short-term or 'prescriptive' situations for problem solving.

9.2.2.4 Upgrading and Reconfiguring Capabilities

The research has found that social enterprises are actively seeking a wider range of diversity when developing relationships with external links. In one case, the social enterprise talks of deliberately partnering with organisations that are as seemingly irrelevant as possible:

we've deliberately actively tried to engage with bodies, like local universities,... universities and bodies like think thanks, think and do thanks, places like the design council bodies also which apparently have very little to do with what we do, but personally I think that's really important as a way of generating new ways of looking at things. If we were looking at criminal justice for example... I'm not likely to find much innovation if all I'm doing is talking to prisoners in the probation service. ...An initial discussion that we're having now with the European space agency [is] about the relevance of social innovation to what they do with space technology. Now on the surface, they have no link whatsoever, but there might be some interesting stuff to do and stuff to learn.

[Interviewee 4]

It suggests that the interviewee seeks to utilise capabilities from these seemingly unrelated organisations for new purposes and in new ways. The researcher argues that this behaviour, evident throughout the transcripts, supports the notion of "carrying out of new combinations of capabilities" (Ziegler, 2010: 256) as it is suggested that the interviewee here is searching for new capabilities through external linkages and, once acquiring these, reconfiguring them for seizing new socially innovative opportunities and implementing or scaling these social innovations up. Furthermore, such acquisition through new relationships that foster inter-organisational learning and improvement of skills and

knowledge, aligns to the views of Teece (2007) that the ability to acquire whilst develop internally are critical skills which should not be neglected and that, learning, upgrading and accumulating skills may require alliance arrangements (Teece, 2007; Branzei and Vertinsky, 2006). This also aligns with Henderson and Clark's (1990) notion that innovations often require new routines to integrate and coordinate with processes, suggesting that organisations must continuously manage, utilise and reconfigure their resources accordingly. Moreover, alternative sources should not be overlooked as opportunities where skills, and other intangible resources may be accessed through interorganisational linkages.

Acquiring new resources and capabilities may present an even bigger challenge for social enterprises that lack financial and other resources that support the searching, acquiring and embedding of new capabilities, and this research shows that there is evidence of this endeavour. Bessant *et al.* state that in order to facilitate development of new capabilities, continuous searching, experimenting and reconfiguring existing capabilities with the insertion of new is vital:

[t]he ability to deliver a continuing stream of innovations to the market place, or to introduce a regular flow of process improvements depends on sustained search and experiment but also on the ability to extract and embed key behavioural routines which support innovation.

(Bessant et al., 2012: 1087).

9.2.2.5 Working with Larger Organisations, Universities and Research Institutions

Through the interviews this study found evidence of larger social enterprises assisting smaller social enterprises in various aspects. These range from generic training to more specific issues such as resources to increase capacity or scale-up innovative activities through collaboration, or simply to encourage co-creation and co-delivering in many different ways. This is consistent with both Dawson and Daniel (2010) and Mulgan *et al.* who depict the process of resource exchange as:

innovation thrives best when there are effective alliances between small organisations and entrepreneurs (the 'bees' who are mobile, fast, and crosspollinate) and big organisations (the 'trees' with roots, resilience and size) which can grow ideas to scale.

(Mulgan *et al.*, 2007: 5)

Descriptive statistics from the quantitative data show that social enterprises were mainly SMEs and specifically, micro-enterprises that employed less than 10 people. This indicates

that social enterprises often arise through individuals or social entrepreneurs identifying a social need that would not be addressed through the market and it is the passion and drive of these entrepreneurs that take such opportunities further. Findings from interviews also support this; particularly in the health and social care sector, social enterprises rose through small groups of professionals or skilled individuals seeking to address societal needs. This was reflected in the review of the literature, which found that much of the research into social innovation relates to the role of social entrepreneurs in recognising an opportunity and pursuing a social mission (e.g. Lehner and Kaniskas, 2012; Korsgaard, 2011; de Bruin and Ferrante, 2011; Perrini et al., 2010; Monllor and Attaran, 2008) as opposed to the contribution of large firms. The insignificance of firm size effect evident in the regression may also support this argument. Furthermore, as it is apparent in interviews that smaller or less resourced social enterprises often seek help from larger organisations, this could also decrease the effect of total employees on the social innovativeness of the organisation as social enterprises are seen to be pursuing socially innovative activities in collaboration with other organisations as opposed to embarking on it alone. This supports the view by Mulgan et al. (2007) that social innovation is done more successfully when pursued in collaboration with established firms supporting smaller organisations.

There is evidence from the interviews that, with the growing interest and academic research in social innovation, social entrepreneurship and social enterprises (e.g. Shaw and de Bruin, 2013; Chalmers and Balan-Vnuk, 2013), there are a number of collaborations between social enterprises and universities. It is found that some social enterprises are working with universities and research institutes to upgrade their knowledge and expertise in the areas they are operating in to foster social innovation. These social enterprises are seeking universities and similar institutions for information, evidence and to test approaches and methods they are seeking to deploy, subsequently increasing their chances of success. Moreover, university research projects are also formed for the purpose of measuring social innovation impact and to justify and provide evidence of the social enterprises activities. This is in line with the legitimating role the university plays as found by Cameron (2012) in a study of social entrepreneurship identifies the university as a place where new knowledge can be integrated into academic tradition, thus giving it legitimacy. By so doing this in turn opens opportunities for funding and recognition for the social enterprises, expanding their number and breadth their of external links, which aligns with the notion by Cameron (2012). It also supports the argument that Teece (2007) presented,

to not overlook external linkages in searching for opportunities and resources. This is particularly the case with universities as they often have information that is not accessible elsewhere and are not regulated in the same way as other types of organisations.

Biemans (1992) also elaborated the potential stimulation universities and research institutes can provide for innovation through research that lead to new technologies and knowledge exchange. Similarly, Cameron (2012) contends that universities can function as an intersection point for specific intellectuals and therefore enabling the exchange of information. The university was highlighted "as playing a central role as an exchange mechanisms and intersection point for specific intellectuals. Furthermore, the specific intellectual is closely linked to the production of knowledge at universities" (*ibid.*: 217). Although the study focuses on social entrepreneurs, it concludes by contending that there is an apparent paradigm shift from understanding and viewing "social entrepreneurs as heroic individuals to social entrepreneurs being seen as actors embedded in a larger system of innovation" (*ibid.*: 271), suggesting that social innovation, as an outcome of social entrepreneurship, arises from interactions within a given ecosystem.

9.2.3 Discussion Summary

This section presented a discussion on the synthesised findings from previous empirical chapters. The mixed methods approach has identified results supporting one of the hypotheses. It also enabled the researcher to probe in more depth the barriers to social innovation in stage two of the social innovation process, which provided explanation as to why the other hypothesis was not supported.

The thesis provided two significant conclusions, which emerged from this research through achieving the objectives. First, social innovation relies on evaluating the 'ecosystem' of stakeholders and exploiting opportunities by engaging in collaborations with a diverse range of organisations. The importance of such relationships resonates clearly across social enterprises as they seek to fulfil their social innovation mandates. In summary, results show that social enterprises are multi-faceted in nature and operate across conventional sectoral boundaries and with a diverse range of organisations that contribute to the assimilation of knowledge, expertise and developing dynamic capabilities for the fostering of social innovation. Findings also reveal that the process of social innovation occurs in

two distinct stages, 'seizing and selection' and 'scaling and implementation', which are harnessed by seven relationship drivers that fall into these categories. Each of these relationship drivers represents linkages to particular types of organisations; suppliers, clients and customers, professional and industrial associations, other social enterprises, consultants and universities or research institutes, for the harnessing of capabilities to develop social innovation(s).

Second, while these organisations realise the value and importance of these relationships, they may not always be able to exploit these as barriers to social innovation such as financial and resource constraints impede social enterprises from effectively developing, deploying and scaling-up their social innovation. Evidence points towards importance of the assistance given by larger established social enterprises or proficient organisations to support social enterprises that are stricken by resource constraints in their pursuit of social innovation. This suggests significant avenues for further research.

9.3 Conclusions: The Social Innovation Process in Social Enterprises

The motivations for this research lie in the convergence of interest between innovation management, the dynamic capabilities perspective and social innovation fields that ask the questions of how social innovation occurs and how inter-organisational relationships matter to organisations engaged in the emergent arena of social innovation. Three main objectives of the thesis were:

- 1. Develop a conceptual model for the social innovation process that illustrates the role of relationships at different stages of the social innovation process.
- 2. Develop an empirical approach towards the study of managing the social innovation process that identifies the external linkages developed by the social enterprise at different stages of the social innovation process.
- 3. Identify the drivers for developing relationships during the process of social innovation, and role of these relationships.

9.3.1 Objective One: The Social Innovation Model

The thesis makes a significant contribution to understanding the process of social innovation. Most importantly, a conceptual model has been provided that depicts this process and how social innovation occurs.

The researcher contended at the beginning of the thesis that each of the drivers for engaging and developing relationships with external organisations should be linked distinctively to one of the two stages of social innovation. In other words, relating to the conceptual model, relationship drivers underpinning external linkages made by social enterprises fall distinctively under the respective stage of social innovation.

The empirical research found that the social innovation process occurs in two stages, supporting the conceptualisation by Nicholls and Murdock (2012). It was revealed by the Categorical Principal Components Analysis (CATPCA) that the seven factors termed 'relationship drivers' representing relationships that support particular capabilities, fell into two distinct dimensions. These two dimensions subsequently were translated as the two stages of social innovation; the first of which is 'seizing and selection' and second being 'scaling and implementation'.

The dimensions under which the individual drivers fall are as thus: for the seizing and selection stage, relationships were engaged to access new markets, stakeholders and communities, and to exploit opportunities; for the scaling and implementation stage, external linkages were developed to build expertise, develop new knowledge and gain new skills.

This evidently supports the work by Nicholls and Murdock (2012), extending their conceptualisation that social innovation occurs in two distinct stages. Furthermore, it identifies the elements that drive social innovation at each stage of the process, specifically, the capabilities harnessed through external linkages.

9.3.2 Objective Two: Managing the Social Innovation Process in Social Enterprises The thesis provides evidence that external linkages that harnessed capabilities in the seizing and selection phase of the social innovation process had significant positive influence on the perceived social innovation performance of the social enterprise. By focussing on the management of the social innovation process, the thesis examines the influence of the relationships engaged in each stage of the process and their impact on perceived social innovation performance. The research also highlighted the barriers faced by social enterprises which impede the social innovation process when external support is available; factors which prevent social enterprises from maximising and exploiting these relationships and developing capabilities.

Two hypotheses were proposed in the thesis. The first hypothesis proposed that relationship drivers harnessing capabilities in the first stage of the social innovation process are positively and significantly influential on the social innovations it fostered. The second hypothesis proposed that second stage relationship drivers were positively related to social innovation; thus scaling/implementation activities are positively related to a firm's perceived level of social innovation.

Results from the hierarchical regression found that this was not the case, only Hypothesis One was supported. Relationships in the seizing and selection phase of the process were significant at 10% and the latter stage was insignificant. Despite this, findings from the interviews suggested that the lack of business acumen, marketing and opportunity risk assessment skills in the majority of interviewed cases is an on-going underlying issue throughout the operations of the organisation. It was evident from the interviews that external linkages providing expertise, knowledge and technical skill were critical for the implementation and scaling of social innovations, supporting the works of Chalmers and Balan-Vnuk (2013), Lyon (2012), and Mulgan *et al.* (2007) for instance. These results suggest that the nature of social enterprises and social innovation is multi-faceted.

Whilst the results from the regression concludes that Hypothesis One was supported and Hypothesis Two was not, the data from the interviews gave evidence that supported Hypothesis Two but also gave insight suggesting as to why only Hypothesis One was supported by the regression. Evidence from interviews point towards the effect resource constraints have on social enterprises, affecting their ability to maximise capabilities harnessed from relationships in the second stage of the social innovation process. Although support through external linkages is accessible, social enterprises are prevented from exploiting this assistance. Through adopting a mixed methods approach, results revealed insight illustrating the complex nature of social innovation and the social enterprise in engaging in relationships with external organisations and how these support social innovation.

The thesis provides significant contributions, extending existing knowledge. The findings support the notions suggested in the social innovation literature as well as technological innovation, that external relationships and cross-sector partnerships play an important role. Social enterprises are heavily reliant on their access to external resources and capabilities extending the works by scholars such as Chalmers (2013) and Phills *et al.* (2008). Their socially innovative activities involve engagement in relationships that cross boundaries of sectors, partnering with organisations from the private and commercial sector, public sector and also government institutions and local councils in the pursuit of exploiting opportunities and scaling innovations (Lyon, 2012). The thesis results contribute to the body of work on cross-firm capabilities (Chalmers and Balan-Vnuk, 2013; Coombs and Metcalfe, 2002) and cross-sectoral collaborations (e.g. Edwards-Schachter *et al.*, 2012; Phills *et al.*, 2008) for new combinations of capabilities acquired from external links (Chalmers, 2013; Bessant *et al.*, 2012; Ziegler, 2010).

9.3.3 Objective Three: The Role of Relationships in Developing Dynamic Capabilities

The research contributes to the understanding of how relationships influence the mechanism through which social enterprise develop social innovation and how social enterprises coordinate their social innovation activities. Evidence contributes to the existing body of literature which state that social innovation arises through interactions between different actors operating within the same social system and are developed through interactions (Neumeier, 2012) between a diverse range of actors and stakeholders external to the social enterprise (e.g. Chalmers, 2013; Chalmers and Balan-Vnuk, 2013; Mulgan *et al.*, 2007; Coombs and Metcalfe, 2002; Defourny, 2001).

Results from the interviews indicate that relationships were exploited for new resources and capabilities. For instance, interviewees working in health and social care sought specialised support for an advanced area of expertise or business acumen, and evidence of interviewees broadening their networks to seek unconventional partners such as the European Space Agency. Moreover, interview findings highlighted that specific types of organisations generally contribute to the development of particular capabilities. Professional and industrial organisations are able to provide information from developments in the industry and access to new markets in the first stage of the social innovation process and also assist in the training of skills later on for implementing innovative activities. Organisations in the same or similar industries and other social enterprises are sought for resources that allow the social enterprise to exploit opportunities and share risks. The expertise required for scaling and maximising social innovations were generally acquired from consultants in the field and in some cases, more experienced or established social enterprises. The findings are consistent with studies on not-for-profit organisations and their reliance on more proficient partners for co-developing innovations (Chalmers and Balan-Vnuk, 2013).

Furthermore, Universities and research institutes were found to play an important role in accessing new stakeholders through research projects that assisted the development of new knowledge. These relationships support the scaling up and reflection process of implementing social innovations, which is consistent with suggestions by Chalmers (2013) that external scientific research bases should also be fully exploited. Such findings indicate that social enterprises have learnt to develop beyond a 'myopic' view (*ibid.*) of this complex concept and are seeking and assimilating a variety and volume of knowledge and expertise (*ibid.*: 18) in widely distributed organisations within the eco-system (Teece, 2007). The accumulation of external capabilities have also allowed social enterprises to reconfigure internal capabilities to match or prepare for socially innovative opportunities, an aspect that closely aligns to the nature of dynamic capabilities (Teece, 2007; Teece *et al.*, 1997) and its role in facilitating innovation (Bessant *et al.*, 2012).

It is also evident that larger organisations such as umbrella associations, and in particular, more established social enterprises are supporting smaller enterprises that are perhaps more impacted by the resource constraints, aligning with the notion Mulgan *et al.* (2007) conceptualises for successful innovation. Throughout the social innovation process, user-interaction and constant dialogue with customers and consumers is evidently important, supporting existing literature with the view of user-driven innovations, and knowledge and resource exchange (Edwards-Schachter *et al.*, 2012; Chesbrough, 2004). In many cases the importance of social networking and social media platforms that are available in this era

was identified, enabling access to new communities and markets at a lesser cost, extending the work of Charalabidis *et al.* (2014).

9.4 <u>Contributions: The Social Innovation Process in Social Enterprises</u>

The thesis provided two significant contributions to existing literature and knowledge. First, it has provided a conceptual framework and model that marries the concepts of innovation and dynamic capabilities to the concept of social innovation. Second, by adopting a mixed methods approach, it contributes to the understanding of social innovation by identifying how relationships with external organisations provide a mechanism through which social enterprises pursue social innovation. The thesis also extends the body of work on cross-firm capabilities, user-driven innovation, open innovation and cross-sectoral collaborations originating from the technological innovation literature by application in the social innovation and social enterprise context. The following sections outlines the contributions made by the thesis to knowledge, and the subsequent implications for policy makers and managers.

9.4.1 Theoretical Contributions to Knowledge

The main contribution the thesis presents to the existing literature in the field of social innovation is a conceptual framework and model based on established paradigms from the field of technological innovation for the development of an enhanced understanding of the nature of social innovation and its process, and the dynamic capabilities that foster that process, harnessed by the engagement in relationships with external linkages. This contribution furthers the work of Chalmers and Bala-Vnuk (2013) and answers the authors' request and suggestion on advancing this field of research:

We believe that closer alignment with the long-established technological innovation paradigm (and its established theoretical tools) can provide further insight into the processes of social innovation... This will help draw some conceptual boundaries around some of the terms being used to describe this form of innovative and entrepreneurial behaviour, and will build legitimacy for the evolving research field of social innovation.

(Chalmers and Balan-Vnuk, 2013: 806)

This research empirically confirms that social innovation occurs in two stages, providing evidence of the concept proposed by Nicholls and Murdock (2012). Most importantly, the conceptual model illustrates where each of these collaborations and development of

capabilities take place with respect to social innovation management and begins to indicate which types of organisations provide support for each 'relationship driver'. Inadequate business management skills are a significant aspect differentiating social enterprises from commercial enterprises. Whilst social innovation fundamentally shares attributes with its technological counterpart in terms of reliance on co-creation, cross-firm capabilities, collaborations and cross-sectoral interactions, it is apparent that the lack of business acumen is one of the biggest factors impeding social innovative activities. Facing barriers such as resource and funding constraints, social enterprises are prevented from exploiting the support that are available, which impedes maximising socially innovative opportunities.

9.4.2 Implications

9.4.2.1 Implications for Policy Makers

As emphasised in the interviews, the majority of social enterprises, particularly smaller or new enterprises lack sufficient business acumen to manage the operation of the organisation. Subsequently, they required and sought external support and training to develop these skills. In line with this, policy makers could support social enterprises by providing accessible and affordable training, particularly in business management skills. To assist social enterprises in developing skills for networking, networking platforms and opportunities could be created to provide social enterprises with exposure to diverse actors and sectors, encouraging collaborations and alliances to develop between social enterprises, public and private sectors. Alliances between social enterprises, public and private sector organisations and associations could provide funding and legal support. Public policies could be revised to encourage cross-sectoral engagement to support social enterprises on social innovation to meet gaps in social provision. In addressing funding issues constraining social enterprises, policy frameworks aiding social enterprises should be examined.

9.4.2.2 Implications for Managers

Through the findings of this research, it can be suggested that social enterprises place a heavy emphasis on developing linkages with external organisations, which are from a diverse background and sector of operation to support the harnessing of capabilities that

foster the pursuit of social innovative. Following this, managers should exploit the importance of developing such relationships with varied organisations, exposing the organisation to diverse opportunities of harnessing capabilities. Providing opportunities to network and collaborate with external organisations to develop internal capabilities of employees and training arrangements should be considered. Internet-based platforms could be employed to improve access of external information and knowledge exchange at relatively low-costs.

9.4.2.3 Implications for Universities and Researchers

The thesis brings to light the importance of universities and other research bodies in supporting social enterprises and social innovation. Subsequently, to enhance the understanding of social innovation, its impact and how social enterprises can be assisted in undertaking social innovation, research into how social innovation performance and impact can be maximised, should be promoted. This also gives social innovators exposure to research that measures and justifies their work, creating academic evidence that potentially increases public acknowledgement and understanding, and also funding opportunities.

9.5 Limitations

The focus of this research in the UK may raise questions of generalisability to the rest of the world, however there are significant advantages of restricting the scope of the study to one country context. Whilst cross-country comparative studies potentially allows for generating a generalizable theory, such studies involve differences in culture, social issues, social policy contexts and legal frameworks that are not the specific focus of the thesis. Additionally, due to data accessibility and time scope, an international or cross-country comparative study would not have been possible.

Moreover, the UK policy context is an interesting one in which to observe the phenomenon of social innovation. Following the notion of the Big Society, government policy has acknowledged social enterprises as a new legal form and subsequently created an expectation that social innovation is to be taken up by social enterprises. However, particularly in the US, much of the social innovation agenda is focussing on conventional firms as part of CSR programmes. Due to this policy context and because there has been little prior research on UK social enterprises, it was appropriate for this to be the focus of the thesis.

There are inherent disadvantages of quantitative studies, however in addressing this adopting a mixed methods design draws the strengths from quantitative empirical data together with the advantages of qualitative methods to offset each method's drawbacks. It is the triangulation of the quantitative and qualitative data that brought to light the results. Quantitative analyses were not capable of asserting a relationship between external linkages developed in the second stage of the social innovation process and perceived socially innovative performance, however the interview data were able to fill this gap and contribute towards significant insight and findings on the nature of social innovation.

Moreover, the questionnaire design was limited to a number of restrictions. The collaboration with the Royal Bank of Scotland and Matter&Co Ltd. meant that the researcher was invited to contribute a limited number of questions and could not increase the scope of each individual question. This restricted the extent to which the researcher was able to probe respondents' views in the survey. With reduced authority and freedom, this constrained the data available for the quantitative analyses and provided less variance in some measures than would have been preferred. For example, due to the nature of the categorical response data in the questionnaire, when assessing the seven relationship drivers, the categorical principal component analysis (CATPCA) had to be employed. This restricts the response measurement more than would have been the case had responses been scaled and may contribute to a more conservative measurement of the relationship between the drivers and social innovation impacts.

While this is a limitation, it does not in any way invalidate the thesis findings for two reasons. First, it is a conservative measure, so does not overestimate relationships, and second, the interviews in the mixed methods design were able to shed further light on these relationships. Additionally, telephone interviews presented some disadvantages in terms of implicit data such as visual prompts and expressions. However as this method is more impersonal, it mean that the interview data is not affected by prejudice such as the interviewer being a junior status and thus providing impartial and unbiased data.

9.6 Future Research Agenda

During this study, new research areas became apparent. The thesis has begun developing a general framework for the social innovation process by employing an empirical study of social innovation upon which future research can be developed. Building upon the research, a 'systems of innovation' perspective (Phillips *et al.*, 2015) can be applied to discover in more depth the role of institutional support, such as from universities and research institutions. To explore the institutional processes and logics prevalent that both constrain, and support the capture of social innovation opportunities and the implications on social enterprises during the pursuit of social innovation. Furthermore, a 'triple helix' can be used as a theoretical lens to examine the factors influencing social innovators and the social innovation process. Additionally, investigation into the networks with private sector firms and linkages to CSR activities can bring insight into the mechanisms of cross-sector collaboration.

Existing literature suggests that social innovation is a learning process and as such, social enterprises with prior experience of socially innovative collaborations are more likely able to maximise their performance in future relationships with external organisations. In this light, to extend the research, further work with interviewees for case studies can explore their prior experience of working with external linkages, the nature of these collaborations, and how that enables them to exploit opportunities better. Similarly, generating case studies with interviewees can further inspect the nature of managing the second stage of the social innovation process and investigate how the barriers to this stage of social innovation faced by some social enterprises can be overcome.

Furthermore, comparative international studies can be considered for future research, investigating the differences in social enterprises in various contexts. This will shed light into, for instance, how different government and legal policies impacts the management of the social innovation process in different countries.

9.7 Concluding Remarks

The thesis has presented a model of social innovation that illustrates the social innovation process and the mechanisms that foster it. The conceptual framework and model in the thesis allows an approach that recognises factors such as: the external linkages that support

capabilities to drive social innovation, the roles each of the external linkages play in the social enterprise's diverse linkages of actors, and particular resource constraints. Questionnaire and interview evidence support the conceptual framework that synthesises a capabilities approach and acknowledges the dynamic and interactive nature of the social innovation process, recognising the crucial influence of a range of different actors. The mixed methods empirical approach also allows in-depth investigations to be carried out into the influences relationships have on the stages of the social innovation process and how social enterprises develop, acquire and utilise these dynamic capabilities.

Despite the nascency of the field, the thesis has pushed the boundaries of social innovation research, contributing to empirical studies into the process and nature of the social innovation process.

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APPENDIX I

Questionnaire Excerpt: Questions Relevant to the Study

Introduction

Thank you for taking part in the RBS SE100 index survey! We're gathering the facts and figures behind the great stories we hear about social enterprise to prove it can really deliver. We can't build the data without your help, so we're very grateful for your participation. Completing the survey should take no more than 25 minutes. Questions range from basic information about your company through to questions about finances, investment and social impact. It's a really simple process but make sure you have your turnover and profit and loss details for the last three years along with any social impact reporting details before you start. If you have any questions about completing the survey, we'd love to help. Please contact the research team by emailing researchteam@se100.net if you need a hand. For any other information, visit www.se100.net or email help@se100.net. PLEASE NOTE: You may not see every question in the survey so please do not be concerned if the numbers of the questions you answer are not sequential.

SECTION 1: ALL ABOUT YOUR ORGANISATION

Q3 What region do you operate in? (Please select one only. This question requires a response)

- **O** East (1)
- **O** East Midlands (2)
- O London (3)
- **O** North East (4)
- **O** North West (5)
- **O** Northern Ireland (6)
- O Outside UK (7)
- O Scotland (8)
- O South East (9)
- O South West (10)
- **O** Wales (11)

- **O** West Midlands (12)
- Yorks & Humber (13)
- O More than one region (14)

Q6 Are you a social firm? (This question requires a response)

- **O** Yes (1)
- **O** No (2)
- O Don't know (3)

Q10 Please mark your primary, secondary, and tertiary business markets with the

corresponding 1, 2, 3. Primary = 1 Secondary = 2 Tertiary = 3

(Please select a maximum of three boxes)

- _____ Business services/consultancy (1)
- _____ Education and youth (2)
- _____ Employment and training (3)
- _____ Environment and recycling (4)
- _____ Finance (5)
- _____ Health and social care (6)
- _____ Housing (7)
- Leisure, sports, arts and culture (8)
- _____ Marketing and communications (9)
- _____ Other (please specify) (10)
- _____ Regeneration (11)
- _____ Renewables and utilities (12)
- _____ Retail (including fair trade) (13)
- Transport (14)

Q11 How many people are employed in your organisation? (This question requires a response. If you are unsure of numbers please insert 'unknown' in box)

	2012 (1)	2011 (2)
Full Time (1)		
Part Time (i.e. more than 12		
hours a week) (2)		

Q16 'Social innovation refers to innovative activities and services that are motivated by the goal of meeting a social need'. Do you believe you undertake social innovation? (This question requires a response)

O Yes (1)

O No (2)

Q17 If yes, were any of your social innovations:

New to the world? "This enterprise engaged in an	O Yes (1)	• No (2)	
innovative activity before any other organisation." (1)			
New only to the organisation? This enterprise			
engaged in an innovative activity that was essentially	O Yes (1)	• No (2)	
the same as that undertaken by another organisation. (2)			

Q18 Do you have relationships with any other organisations?

- **O** Yes (1)
- **O** No (2)

Q19 Why do you develop these relationships? (Please tick all that apply)

- □ To gain new skills (1)
- □ To develop knowledge (2)
- \Box To build expertise (3)
- □ To exploit opportunities (4)
- □ To access new markets (5)
- □ To access new communities (6)
- □ To access new stakeholders (7)
- □ Other (please state details) (8) _____

SECTION 2: FINANCIAL INFORMATION

Q1 How long has your organisation been trading?

- **O** 3 years or more (1)
- **O** Less than 3 years (2)

Please supply the date since when your organisation has been trading (DD/MM/YYYY).

Q2 Please supply details (£) of your most recent annual turnover as reported in your annual accounts. Please ensure all figures are entered in whole numbers, with no spaces or commas (eg. 1000000). Please enter 0 if not applicable. Please send your most recent accounts to researchteam@se100.net so that we can verify your answers. (This question requires a response)

Most recent year (£) (1)	
Year before (£) (2)	
2 years before (£) (3)	

Q3 Please supply the END DATES of each financial year. (Please use this format for date DD/MM/YYYY e.g. 01/12/2011)

Most recent financial year end date (1)

Year be	efore	(2)
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2 years before (3) _____

This year the RBS SE100 has partnered with Bristol Business School, University of the West of England. Would this organisation be willing to be approached by the Business School in connection with further enquiries?

O Yes (1)

O No (2)

Final Checks... Just a few final formalities and then you're done! Thank you very much for your time so far but please do take five minutes to give your answers one final read through. To validate your entry please send your most recent set of financial accounts and any information on your impact (e.g. social accounts, SROI etc.) to researchteam@se100.net. Please note that all data will be included in an aggregated form in the RBS SE100 Data Report and your organisation may also be named as a participant

in the Index. The top 100 organisations will be ordered according to their growth figures and the top 100 ranking will be published. We will also publish certain information about leaders in the growth and impact tables. However, we will not reveal sensitive financial information about individual enterprises that is not already in the public domain or publicly available, and we will contact you if we would like your organisation to be included in a case study or feature.

APPENDIX II

Semi-Structured Interview Protocol: Guide Questions

Introduction

This interview programme forms one component of a University of the West of England (UWE) doctoral research programme undertaken at the Bristol Business School. This programme will focus on Social Enterprises' development of capabilities during the process of social innovation (SI); SI are innovative activities for the purpose of creating social value and meeting a social goal.

The interview programme has been divided into three sections. The first are general questions about your position and responsibilities, the following two sections look at internal and external factors influencing the development of capabilities within SEs.

1. General

- 1.1 What is your position? What does this involve?
- 1.2 Who are you ultimately responsible to?
- 1.3 How long have you worked for this enterprise/been in this position?
- 1.4 What is the size of the firm in terms of employees and turnover?

2. External factors

What influence do external relationships have on the process of social innovation?

- 2.1 In the pursuit of social innovation do you have relationships with external organisations such as:
 - i. Suppliers
 - ii. Organisations in the same industry
 - iii. Consultants/Commercial labs
 - iv. Universities or other Higher Education Institutions
 - v. Professional/industrial associations
 - vi. Clients/customers
 - vii. Any other not mentioned
 - a) On a scale of 1-7 (1 being of lowest importance and 7 being highest), how

important are each of these relationships with these organisations?

- b) Is there a relationship with an organisation or institution that is particularly important? And why? (e.g. enter new markets, exploit opportunities)
 - i. What is the nature of these relationships?
- 2.2 At what stage of the innovation process are each of these relationships most important (e.g. at the beginning, scaling-up etc.)? And why?

Do you have access to any relevant sources of knowledge and skills outside the organisation?

- 2.3 How do you monitor external developments? (e.g. conferences, market analyst, events...)
- 2.4 What inadequacies in relevant knowledge/skills seem to exist within your organisation?
- 2.5 Is there a means by which your organisation can set about acquiring such knowledge?
- 2.6 How do you keep abreast with your competitors' activities with respect to social innovation? (e.g. resources, knowledge, networks...)

3. Internal factors

How is the innovation strategy formulated within your organisation?

- 3.1 Who are the key players regarding decisions about SI?
- 3.2 What are their backgrounds (e.g. technical, financial)?
- 3.3 Who is ultimately responsible for any decisions made?
- 3.4 What determines whether an innovative opportunity is accepted or rejected?
 - a) What criteria must it fulfill?
- 3.5 Which (if any) competences are relevant in the identification and exploitation of socially innovative opportunities? Are these available/supported internally or externally? (i.e. supported by external links or largely done within the SE)
- 3.6 How are innovative opportunities perceived in terms of:
 - a) Resources
 - b) Incentives (who will do it)
 - c) Internal capabilities
 - d) Development of new capabilities

APPENDIX III

NVivo Coding Schema

		Code
1.	1.	Finance
2.		a. Funding difficulties
3.		b. Pro Bono Freebies
4.	2.	Innovation
5.		a. Innovation Process
6.		i. Stage 1 - Seeking Exploiting
7.		1. Seeking & Selection
8.		2. Seizing & Exploiting
9.		ii. Stage 2 - Implementing Scaling Up
10.		1. Implementing
11.		2. Scaling Up
12.		b. Innovative Delivery
13.		c. Innovative Outcome & Output
14.	3.	Monitoring & Networking
15.	4.	Networks and Links
16.		a. External Expertise (Business)
17.		b. External Expertise (Social)
18.		c. External Organisations
19.		i. Clients & Customers
20.		ii. Consultants & Commercial Labs
21.		iii. Institutions
22.		iv. Organisations in same industry
23.		v. Professional Industrial Associations
24.		vi. Suppliers
25.		vii. Universities & HEI
26.		d. Help from larger SEs
27.		e. Helping smaller SEs
28.	5.	Relationship Factors
29.		a. Gain Skills
30.		b. Develop Knowledge
31.		c. Build Expertise
32.		d. Exploit Opportunities
33.		e. New Markets
34.		f. New Communities
35.		g. New Stakeholders
36.	6.	Strategy & Resources
37.		a. Dynamic capabilities
38.		b. Dynamic environment
39. 40		c. Key Competences
40.		d. Weak resources (Inadequacies)
41. 42.		i. Weak business resourcesii. Weak social resources
42. 43.	7.	ii. Weak social resources The Organisation
43. 44.	1.	
44. 45.		a. Hybridityb. Internal Reliance
45. 46.		
46. 47.		c. Legal Modeld. Metamorphosis
4 7. 48.	8.	Value Making
40. 49.	0.	a. Economic Value
49. 50.		b. Social Value
50.		