The role of strategic intent in collaboration: knowledge creation and transfer in the Australian logistics industry

PART A

By

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Declaration of Originality

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Abstract

Collaborating is a strategy frequently adopted by senior managers in organisations to achieve cost savings or access new markets. Collaboration provides a social, interactive context for knowledge creation and transfer. Knowledge is valuable and emphasised by organisational strategists to leverage diverse intellectual capabilities and human capital, which may contribute to sustainable competitive advantage. To maximise the opportunities to learn and innovate arising from a collaborative venture, the role of strategic intent may be significant. Strategic intent provides an objective focus for senior managers in organisations to assist the strategy process.

The purpose of this thesis is to explore the role of strategic intent in collaborations on knowledge creation, its transfer and absorptive capacity. Absorptive capacity is a critical component of an organisation's ability to exploit knowledge creation and transfer. The definitions, elements, effects and interdependencies of these key concepts are the focus of continuing development within the academic and practitioner literature. There is a rich, conceptual literature with diverse perspectives that have little convergence and low levels of relevant empirical research. Additionally the comprehensive literature review highlights that cross-pollination of ideas or frameworks from diverse perspectives is lacking. Being able to offer insights to senior managers to inform their strategising is difficult in this complex domain.

A multi-theoretical approach to this exploratory study has been adopted to assist in reducing complexity, drawing together key elements of diverse perspectives and

clarifying the interdependencies between the concepts. A key theory is a model of knowing which shows the knowledge processes at work in an organisation. . The key concepts from the literature are explored with a mixed methods study of 32 senior managers in the Australian logistics industry. This industry is significant to the national economy and contains inter-organisational networks with many opportunities to collaborate. In Australia, the logistics industry is competitive, dynamic yet fragmented. Forming collaborative ventures becomes a potential strategic solution in this environment, an action strongly supported by the respondents.

This thesis suggests strategic intent is important to senior managers and their daily practices connected with collaboration. Strategic intent provides a frame of reference that is regularly adapted to changes in the environment. Collaboration generates strategic benefits as a way of doing business, facilitating growth and enabling solutions from which knowledge creation and transfer occur. Staff development practices to further absorptive capacity improve the knowledge effects of collaboration, with personal interaction essential. The roles of strategic intent and absorptive capacity have been incorporated into the knowing model. With senior managers heavily involved in collaboration, strategic intent creates an important framework for their daily practices, contributing to knowledge creation and transfer in collaborations. Little significant difference to the findings is evident from organisational size or senior managers' experience, qualifications or maturity. Future opportunities for further research include improved knowledge of the dynamic interplay of the central concepts, including multiple levels of management and utilising a longitudinal study.

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Glossary

ABS	Australian Bureau of Statistics
CFO	Chief Financial Officer
CEO	Chief Executive Officer
CAQDAS	Computer-assisted qualitative data analysis
GM	General Manager
IMA	Innovation Masters Award
IPO	Initial Public Offering
M&A	Merger and Acquisition
MBA	Master of Business Administration
MD	Managing Director
MNC	Multinational Corporation
NAsia	North Asia
NVivo	Qualitative data analysis software package
IPO	Initial Public Offering
PRQ	Primary Research Question
R&D	Research and Development
RBV	Resource Based View
SECI	Social Externalization Combination Internalization
SRQ	Secondary Research Question

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Chapter 1 Introduction

1.1   Background to the study

Organisations operate in a dynamic business environment, in which a strategic competitive advantage can be quickly eroded, for example by technological change. To counteract this risk, organisations seek potential opportunities that can be exploited, preferably into the long-term, to enable continued growth and increase sustainability of the enterprise (Hamel & Välikangas 2003). Traditionally such opportunities were found based on internal strengths, for example a flourishing R&D department, or by acting alone in the external environment, such as a takeover.

However, over recent decades it is increasingly being recognised by academics and practitioners that more can be gained strategically by working together with other organisations than by working alone in competitively-bound isolation. Organisations are changing their willingness to collaborate and share, giving rise to more collaborative ventures (Hansen & Nohria 2004). Collaborative ventures give access to existing sources of competitive advantage, new ideas and other potential sources of long-term prosperity (Spekman, Kamauff & Myhr 1998). Today diverse collaborative ventures ranging from formalised contractual arrangements, such as a joint venture, to more informal business arrangements, for example co-sharing a warehouse, are flourishing. Senior managers then are recognising that by organisations working together strategically, mutual benefits can arise.

In a dynamic business world recent history has 'witnessed a number of structural transformations in the organisation of industrial activities' as major companies like Wal-Mart and Proctor & Gamble learnt from trading partners, particularly the Japanese (Palpacuer & Parisotto 2006, p. 407). Simultaneously information

technology has enabled far-reaching change in the competitive paradigm (Bruinsma, Gorter & Nijkamp 2002; Gnyawali & Park 2009; Vargo & Lusch 2004). Consequently uncertainty and discontinuous change have become the norm (Ashkenas 1999; Christopher & Holweg 2011; Dicken 2007; Li Destri & Dagnino 2004; Rodrigue 2006; Storey et al. 2006). Deregulation, technological discontinuities and geopolitical shocks such as the demise of communism all contribute to this dynamic turbulence (Hamel & Välikangas 2003). Extended entities in a boundaryless world are increasingly common, driven by the economics of networks (Bruinsma, Gorter & Nijkamp 2002; Hansen & Nohria 2004; McGee & Sammut Bonnici 2002; Shapiro & Varian 1999) such that the global economy now comprises 'a variety of complex intraorganizational and interorganizational networks' (Dicken 1998, p. 239). Moreover global sourcing, shorter product life cycles, sophisticated products, customisation and fluctuating customer demand all contribute to this faster-paced business world (Bryant & Wells 1998; Soosay, Hyland & Ferrer 2008; Storey et al. 2006), increasing turbulence and complexity.

Organisations are themselves dynamic, continually transforming processes and products while searching for sustainable strategic advantage in the modern business world (Mattson 2003; Sandow & Allen 2005). Additional forces for change may arise from stakeholders, for example demanding reduced costs which are to be achieved by globalising or outsourcing (Cruijssen, Dullaert & Fleuren 2007; Mattson 2003; Palpacuer & Parisotto 2006). Such continual change and dynamism means that both the organisation and its business environment are coevolving; these complex adaptive interrelationships create the business ecosystem (Lewin & Volberda 1999; Murmann 2013; Peltoniemi & Vuori 2004). Changes in the business ecosystem

reverberate around business networks as witnessed by the impact of the global financial collapse in 2007 on myriad industries and economies. Amidst this coevolution is growing recognition of connectivity. Connectivity, for example with customers, suppliers and local research institutes enables emerging trends to be observed and critical information gathered (Deming 2000; Drucker 1988; Sandow & Allen 2005; Senge 1990) regardless of the likely effects or the organisation's particular circumstances (Mattson 2003). In this changing business landscape, there is both a heightened awareness of the value of connectivity for organisations and increased need for sustainable competitive advantage.

Sustaining competitive advantage for an organisation is not straightforward, often requiring that senior managers embrace dual ambitions of exploration and exploitation concurrently. March (1991, p. 71) observed 'maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity'. Exploitation may require both increasing 'organisational efficiency and actively protect[ing] present competitive advantages' (Li Destri & Dagnino 2004, p. 777), while simultaneously exploring opportunities for future sources of competitive advantage to optimise growth and create long-term sustainability (Hamel & Välikangas 2003; Koza & Lewin 1999; March 1991; Penrose 1959; Wernerfelt 1984). Such dynamic capabilities enable an organisation to purposefully adapt its knowledge base (Helfat & Peteraf 2003). There is little empirical research investigating such dual ambitions and dynamic capabilities (O'Reilly & Tushman 2011). An organisation's ability to adapt to dynamism and market changes is critical to sustainable competitive advantage when connectivity is high. Sustainable strategic

advantage relies on organisations searching successfully for the balance between continuity and change.

Consequently key success factors such as 'speed, flexibility, integration, and innovation' become critical to sustainable competitive advantage (Ashkenas 1999, p. 5). Many of these factors have greater potential for strategic advantage due to the impact of technology, which enables faster communication and connectivity for example between organisations and their stakeholders, such as customers and suppliers (Cheng, Chen & Mao 2010; Fawcett, Ellram & Ogden 2007). Tranfield, Denyer, Marcos and Burr (2004, p. 375) indicate successful companies are those that 'exploit knowledge, skills and creativity'. Fundamental to this is the ability to continually develop knowledge capabilities as part of an organisation's intellectual capital, such as incorporating new practices and improvements in technology (Giannakis 2008; Teece 1998; Turner, Swart & Maylor 2013). Knowledge is a resource which, according to resource-based theory, can contribute to competitive advantage (Barney 2001; Penrose 1959; Wernerfelt 1984). Knowledge enables existing resources and capabilities to be harnessed for exploitation and to be recombined in novel combinations for innovation. Access to new knowledge provides an organisation with different opportunities for an inimitable competitive advantage (Adner & Kapoor 2010; Garcia, Calantone & Levine 2003; Hernández-Espallardo, Sánchez-Perez & Ségovia-López 2011; Song & Thieme 2009). Moreover access broadens the knowledge base (Bierly, Damanpour & Santoro 2009; Hernández-Espallardo, Sánchez-Perez & Ségovia-López 2011) and facilitates the co-creation of new knowledge through interactivity (Chapman, Soosay & Kandampully

2003; Ramaswamy & Gouillart 2010). Knowledge creation and transfer are thus vital to an organisation's long term sustainability.

Competitive advantage then no longer solely resides in positioning and responding to market needs, but also includes the strategic exploitation of the organisation's intellectual capital (Appelbaum & Gallagher 2000; Haugstetter & Cahoon 2010; Mason & Leek 2008; Sharkie 2003; Von Krogh, Ichijo & Nonaka 2000). Successful organisations are thus enacting continuous change, connecting more with other organisations and exploiting knowledge and creativity as their strategic foundation.

1.2   Connectivity and collaboration

Networks are a critical source of connectivity between organisations, such as those formed by logistics systems and supply chains. Within these interorganisational networks are other competing organisations, governments and customers. Interorganisational networks contain sources of value such as access to cost savings and distributed knowledge which may be successfully exploited (Bhatnagar & Viswanathan 2000; Dicken 2007; Tsoukas 1996). These interorganisational networks are continually evolving and thus dynamic, involving multiple actors searching for synergies that create mutual benefits. Arising from this then, is increasing recognition that logistics systems, supply chains and other inter-organisational networks provide connectivity to potential sources of value in the marketplace; such networks can enhance or provide competitive advantage and long-term sustainability.

Connectivity enables reciprocity and mutuality both tangibly, such as through IT systems, or in a more intangible way, for example with relationships (Horvath 2001).

Increasingly the inherent benefit of leveraging advantage from relationships has been brought to the fore (Dyer & Singh 1998; Eisenhardt & Martin 2000; Harrison et al. 2001). The interrelationships, for instance with manufacturers, distributors and retailers, enable critical flows such as information, finance, physical goods, services, transportation, storage and knowledge (Fernie 2004; Kim 2005; McCormack, Johnson & Walker 2003; Porter 1998). To maximise benefits from these flows organisations must both integrate and manage the value-creation process effectively and efficiently to simultaneously achieve customer satisfaction and a rewarding financial outcome for all participants (Ballou 2004; Whiteoak 2004). Accessing these critical flows and effectively integrating them into an organisation's processes become critical capabilities in the current competitive paradigm.

However organisations are connected not only to both their customers and suppliers through collaborative ventures and their networks but also to their competitors. Lado, Boyd and Hanlon (1997, p. 111) comment 'success in today's business world often requires that firms pursue both competitive and cooperative strategies *simultaneously*' (emphasis in original). With both rivalry and cooperation key features of the business landscape, the era of coopetition has been born; a term coined by the founder of Novell, also known as alliance capitalism (Bengtsson & Kock 1999; Johanessen & Olsen 2010; Koza & Lewin 1999; Mattson 2003; Song 2003; Tsai 2002). Coopetition creates an environment in which organisations are operating in paradox (Clarke-Hill, Li & Davies 2003; Lewis 2000; Nilsson 2006).

In seeking ways to establish, develop and retain long-term relationships for leverage, organisations have turned to collaborative ventures with other organisations.

Consequently collaborative ventures are proliferating, with a view to establishing key long-term relationships within interorganisational networks to exploit synergies from cooperation and coordination (Hamel & Prahalad 1989; Hansen & Nohria 2004; Skjoett-Larsen, Thernoe & Andresen 2003; Spekman, Kamauff & Myhr 1998). Gnyawali and Park (2009) indicate that these relationships and networks are critical to both the strategy and the performance of SMEs. Such interrelationships forged in collaborative ventures between organisations offer the potential to achieve long-term sustainability through connectivity.

Collaborative ventures initially formed to gain market access may subsequently become critical nodes that facilitate access to, and creation of, new ideas that have the potential for innovation and change. The focal point for competitive advantage, then, is no longer necessarily the competitive advantage of an individual organisation, but the competitive advantage that comes from judicious use of the touch points and their critical flows and the subsequent synergies arising in the interorganisational network (Ballou 2004; Bruinsma, Gorter & Nijkamp 2002; Whiteoak 2004). Collaborations with competitors are vital for SMEs for example to access economies of scale, combine resources for additional leverage and work together to reduce individual risks as indicated by scholars such as Morris, Koçak and Özer (2007). Touch points accessed through communications and interactions in the context of these networked relationships enable management practices that foster organisational sustainability through access.

A critical element in interorganisational relationships is people, who form part of an organisation's knowledge base. People and their embedded knowledge, skills and

expertise are increasingly being seen as pivotal to long-term business sustainability and central to a knowing organisation (Adler & Kwon 2002; Choo 1998; Felin, Zenger & Tomsik 2009; Laycock 2005). A knowing organisation is adaptable, engaging in continuous learning and innovation, providing many opportunities for knowledge creation through interactivity by bringing together diverse knowledge, expertise and activities (Felin, Zenger & Tomsik 2009; Nicolini, Gherardi & Yanow 2003). To readily assimilate knowledge, both absorptive capacity and some overlapping knowledge are necessary (Cohen & Levinthal 1990; Minbaeva & Michailova 2004; Reagans & McEvily 2003; Szulanski 1996). Absorptive capacity is contained in an organisation's routines and processes that continually assimilate knowledge to advantage, producing a dynamic organisational capability (Zahra & George 2002). Tang (2011, p. 273) explains that the 'absorptive capacity of knowledge recipients is a necessary condition for efficient knowledge transfer, but it is not sufficient'. The transfer of causally ambiguous and complex knowledge may require adaptation and reconstruction (Attewell 1992) and relies on the knowledge sender's attitudes, prior experience and behaviours to ensure that the receiver understands (Minbaeva & Michailova 2004). There are however relatively few empirical studies that have investigated the nature of this link across organisations' boundaries on knowledge transfer (van Wijk, Jansen & Lyles 2008).

1.3   Collaboration and logistics

Collaborative ventures in interorganisational networks create an ideal conduit to access knowledge and potential sources of new knowledge and innovation by crossing organisations' boundaries and interfacing with diverse stakeholders (Chen, Mattioda & Daugherty 2007). Logistics provide a critical connection in

interorganisational networks being the management of the flow of goods and services from point of origin to point of consumption; increasingly its strategic significance is being recognised (Foggin 1989; Lambert, Emmelhainz & Gardner 1999; Mason & Leek 2008). Over recent decades there has been growing recognition of logistics as both a 'source of competitive advantage and a crucial strategic imperative' (Bhatnagar & Viswanathan 2000, p. 15). Further, logistics is a dynamic context, being characterised by frequent changes to service offerings (Yazdanparast, Manuj & Swartz 2010). Its role within an organisation contributes to sustainability not only of that organisation but to the whole distribution network (Rodríguez-Díaz & Espino-Rodríguez 2006). Moreover innovation occurs from learning in a logistics context (Langley 1999). Logistics thus provide opportunities to explore both continuity and change through knowledge creation and transfer.

Although logistics typically moves product physically through interorganisational networks, the organisations that constitute the network are usually service providers, such as transporters, freight forwarders and distributors. Coopetition in the context of service providers can be complex to manage as it involves a paradox; the 'simultaneous need to create value from knowledge and to protect it from competitors in particular' (Ritala, Blomqvist & Hurmelinna-Laukkanen 2009, p. 259). Ritala, Blomqvist and Hurmelinna-Laukkanen (2009, p. 259) comment '[I]t is not necessarily wise for organisations focused on creating new value from knowledge-based assets to restrict knowledge sharing' creating the paradox of logistics.

Moreover evidence suggests collaborations in logistics are increasing (Dapiran et al. 1996; Kampstra, Ashayeri & Gattorna 2006; Teece 1988; Zineldin & Bredenlöw 2003). The contribution of collaborations to effective and efficient logistics appears crucial to sustainability; by integrating and strategically managing interdependencies within networks, logistics increases the potential for both exploration and exploitation to provide sustainability. By leveraging from these interorganisational networks, a key part of the value creation process can be strategically managed. Simultaneously a potentially sustainable competitive advantage can be built (Esper, Fugate & Davis-Sramek 2007). Boundary-spanning activities then, such as collaborative ventures in logistics, provide connectivity and an opportunity to create sustainability in today's dynamic business environment. Logistics provides a valuable, dynamic context to explore collaborative ventures and knowledge creation and transfer.

1.4   Strategic intent

Collaborative ventures can be short-lived. The valence of connectivity between organisations within logistics can easily change and the task of identifying the flow-on effects may be complex. Research indicates that organisations that recognise, align and adapt to external changes in the environment are more successful competitively (Fawcett, Magnan & McCarter 2008a; Gattorna 2006; Stonebraker & Afifi 2004). Senior managers are then placed in a paradoxical position (Lewis 2000) wherein the initial reason for a strategic action may change. Managing assets and market positions for future viability in such evolving situations is complex (O'Reilly & Tushman 2008; Rothaermel & Alexandre 2009). Hamel and Prahalad (1989, 1994) have suggested that strategic intent provides guidance and direction to an

organisation's activities and decision-making, being both a 'desired leadership position' and an 'active management process to achieve it' (Hamel & Prahalad 1989, p. 64). Generally strategic management principles have been founded in stability (Doz & Kosonen 2010), which is becoming increasingly rare in today's dynamic marketplaces. Moreover, there has been little empirical investigation of strategic intent; for example little is known of its nature and role, how it is impacted by market dynamism or its relevance in strategy dynamics. Further strategic intent is regarded as an antecedent of an organisation's ability to switch between continuity and change that requires empirical research (Raisch & Birkinshaw 2008). Consequently the role strategic intent may play in collaborative ventures is unknown.

When establishing collaborative ventures, organisations generally have strategic intent to either exploit an existing competitive advantage, such as through market access, or to explore the potential for a specific innovation, for example based on technology (Levinthal & March 1993; March 1991; Quinn & Cameron 1988). Central to such ventures are interactions with various other organisations' people and systems. From such interactions knowledge is created (Almeida, Phene & Grant 2003; Kogut & Zander 1992; Nonaka & Takeuchi 1995). The knowledge created may occur in any or all processes, systems and ways of thinking and is available for organisational learning through absorptive capacity. Each organisation's absorptive capacity is thus of strategic significance to the development and transfer of knowledge in collaborations. Absorptive capacity is affected by managerial strategy and actions (Andersén & Kask 2012). Knowledge can be captured and utilised to instigate change in either or both of the collaborating organisations, or drive the creation of a new entity. However there appears to be a separation between

knowledge creation and organisational learning in the academic literature (Easterby-Smith & Prieto 2008; Vera, Crossan & Apaydin 2011), making it difficult to proffer constructive ideas on its management in a collaborative venture. Further, serendipitous knowledge created as part of the interactions within the collaborative venture and its formation risks being overlooked, for instance it may be a knowledge effect that is additional to the purpose the collaboration was formed to achieve. Opportunities for growth and change may therefore be being missed as the strategic intent may act as blinkers on the people and the knowledge creation and transfer processes both within the collaborative venture itself and on those of the collaborating organisations.

By exploring the role of strategic intent in knowledge creation in collaborative ventures this research investigates its effects on the knowledge creation and transfer of a collaborating organisation. Combining different organisational elements, such as knowledge creation, absorptive capacity and strategic intent, is little researched either conceptually or empirically (Cao, Gedajilovic & Zhang 2009; Napier, Mathiassen & Robey 2011). Further the majority of empirical research into collaborative ventures has occurred in technology in manufacturing organisations (for example Jassawalla and Sashittal (1998), Parker (2000), Nakano (2009) and Fiaz (2013)). A neglected area for empirical research is also collaborations that occur in logistics with few studies (examples include Stank et al 2001; Simatupang 2004; and Sandberg 2005). To begin to address this imbalance the logistics industry has been chosen as the context for this study. Logistics is a vital conduit for freight movement for individual organisations and a nation's trade, with a dynamic nature. The dynamic context provides a setting to investigate strategic intent and its significance

to senior managers and their strategising. Furthermore the complex network of freight logistics offers many opportunities for coopetitive behaviour.

While recognising the importance of logistics to all developed and developing countries, Australia is chosen as the geographical scope of the study due to its heavy reliance on freight movement. Firstly Australia is an island continent dependent on freight networks, with a significant transport and logistics sector. Australian exports comprise approximately 20% of GDP (Department of Foreign Affairs and Trade 2013). The development and productivity of this $94billion industry that contributes approximately 3.1 per cent to Australian GDP is critical to the Australian economy. There are expectations that the freight task in Australia by 2020 will be double that of 2006. (Bureau of Transport Economics 2001; Kittel & Haugstetter 2011; KordaMentha 333 2012; National Australia Bank 2012). With the majority of the population widely dispersed along the coastal regions, logistics is critical to the nation's prosperity and growth.

Secondly the importance of collaboration across the Australian logistics system is necessary to improve productivity and innovation (Green 2009; Tasmanian Freight Logistics Council 2010; Transport and Logistics Industry Skills Council 2013). Interest in collaboration is increasing due to recognition of its value to a nation that has a small population relative to its geographical size. Collaboration is a way of overcoming critical manpower and equipment shortages, whilst reducing investment requirements for individual organisations (Desai 2010; Song 2003). Additionally the coopetitive networks that are thus being formed are acknowledged as being under-represented in academic research (Priestley & Samaddar 2007). Consequently this

study focuses on Australian logistics as its context to contribute to the understanding of the role of collaboration in knowledge creation and transfer.

1.5   Research questions and research objectives

From the above discussion, it is considered that strategic intent may play a role in knowledge creation and transfer; however there is little empirical research on this relationship. Given that collaborations are a potential source for knowledge creation and transfer, the Primary Research Question (PRQ) for this study is:

PRQ: *Does strategic intent contribute to knowledge creation and transfer in collaborations?*

To investigate the PRQ, three Secondary Research Questions (SRQs) have been developed. Sources of innovation are necessary to an organisation's long-term sustainability. Consequently knowledge creation and transfer may be a strategic benefit of a collaborative venture. To discover if senior managers in the Australian logistics industry regard collaborative ventures as potential sources of knowledge creation and transfer, the first SRQ investigates:

SRQ1:   *What are the potential strategic benefits of forming collaborations?*

Strategic intent and organisational longevity are addressed at senior management level. Consequently to answer the PRQ it would be valuable to ascertain if senior

managers take direction from an organisation's strategic intent when deciding to form collaborative ventures. The second SRQ is expressed as:

> ***SRQ2:*** *Is an organisation's strategic intent considered when forming collaborations?*

Finally, absorptive capacity is a critical component of an organisation's capability to exploit knowledge creation and transfer (Zahra & George 2002). Decision making, through managerial strategy and actions, affects absorptive capacity (Andersén & Kask 2012). Having an impact on knowledge creation and transfer it may be expected that absorptive capacity is considered strategically. Such consideration would affect the knowledge creation and transfer that occurs in a collaborative venture. Consequently the final SRQ establishes:

> ***SRQ3:*** *Is absorptive capacity strategically developed to enhance knowledge transfer and creation in collaborations?*

By researching these issues in Australian logistics this study may provide information to both academics and practitioners on the links, if any, between strategic intent and knowledge creation and transfer in collaborative ventures. To address the research questions in greater depth, an approach that draws from the general management literature and pertinent theories, a multi-theoretical approach, is adopted to stimulate the development of new ideas and better understand the complex reality of Australian logistics. The significance of the research is discussed below.

1.6   Significance of the research

By investigating the role of strategic intent in collaborative ventures in Australian logistics, this research contributes to the growing body of knowledge relating to the practices of senior managers in organisations. With a particular focus on the application of strategy in the significant area of knowledge creation and transfer, the research study may contribute broadly to a better understanding of strategy implementation in practice.

More specifically, it may ascertain if strategic intent has a determining role on the strategic effects of collaborative ventures. A key effect that will be investigated is knowledge creation and transfer. Knowledge creation and transfer occur in an interactive environment, for instance where two or more entities intersect in a collaborative ventures. Interactions provide opportunities for the emergence of new ideas and innovation. For senior managers, then, collaborative ventures provide a rich environment in which opportunities may occur for growth and sustainability.

By investigating collaborative ventures this study will enable a more detailed investigation of aspects of their role and strategic significance to an organisation, particularly in Australian logistics. It will respond to comments by Cruijssen, Dullaert and Fleuren (2007) that research into collaborative ventures in logistics is scarce by contributing some empirical data to begin to address that scarcity.

The research will be investigating collaborative ventures from the perspective of senior managers, meeting requests by authors such as Sandberg (2007) for more research into their role in logistics. Given that the focus of this research will be the

role of collaborative ventures in Australian logistics which is heavily reliant on services, for instance storage and transport, it will investigate if there exists an opportunity for serendipitous knowledge creation in such interactive environments. Such findings can better inform senior managers in service industries on the significance of collaboration to maximise opportunities for knowledge creation, transfer and innovation.

Additionally by researching logistics in Australia this study may also contribute to the wider understanding of knowledge creation in interorganisational networks generally, particularly in coopetitive networks, and the role of strategic intent. By investigating the factors that may affect the transfer of knowledge between organisations it contributes to the understanding of the role of inter-organisational links and competitive advantage.

Moreover the research's finding with regard to the impact of strategic intent on absorptive capacity and knowledge creation and transfer processes within collaboration will further develop academic and practitioner understanding of these key processes and their role. Furthermore it may identify if the role of strategic intent in these processes needs consideration by senior managers to enable potential opportunities for growth and innovation.

Another potential contribution of the thesis is being a multi-theoretical study, which draws together diverse elements of the general management literature. Nooteboom (2004, p.5) comments that 'an integrated approach runs the risk of becoming eclectic, incoherent or even contradictory' when drawing on a wide range of disciplines;

despite this, a diversity of scholarly exchanges leads to discipline development (Linderman & Chandrasekaran 2010). Moreover it does reflect an organisation's reality. Powell, Koput and Smith-Doerr (1996, p. 118) insightfully argue 'the neat distinctions of theory' are often blurred by 'the messy world of practice'. Rarely is any one area of an organisation considered in isolation strategically; the very fact that people are involved means that organisational managers need to be knowledgeable across different functions, such as both marketing and logistics, which may be informed by multiple theories.

Finally this thesis may contribute further to better understanding formation processes and benefits of collaboration that may contribute to a wider understanding of a theory of collaboration. Following Gray's (1989, p. 230) conceptualisation of a collaboration as a 'negotiated interorganizational order' the way the stakeholders collectively construct strategy in the face of exogenous environmental pressures may be better understood. It may also confirm that these collaborative ventures are 'imprecise, emergent, and (sic) exploratory' which provide opportunities for knowledge creation and transfer (Gray 1989, p. 230).

1.7   Structure of the thesis

The thesis presented here investigates the role of strategic intent in knowledge creation and transfer within the Australian logistics industry. Better understanding of the role of senior management's practices on the outcomes of collaborative ventures in this growing industry may facilitate improvements that will impact on long term sustainability and productivity in organisations. In an industry where profit margins

are traditionally low, such understanding is valuable, making the topic of this study important.

Providing key findings relating to a comprehensive literature review and data collection on this important topic are presented as follows. Subsequent to this introductory chapter, Chapter 2 investigates strategic intent and its role in giving direction to senior managers' practices. Collaborative ventures are studied in more detail in Chapter 3, from the fundamentals of what they are to their strategic effects. Chapter 4 then analyses knowledge creation, linking it to the interactivity and connectivity of collaborative ventures. Chapter 5 focuses on the research methodology taken to investigate the research questions, including the evolutionary perspective which is utilised in this study. Chapter 6 provides details of data analysis, the Australian logistics industry and collaboration from the relevant findings of this research to give context to the subsequent chapter. Chapter 7 then elaborates on the research findings related to strategic intent and knowledge effects. In conclusion, Chapter 8 summarises the research study and its key findings, highlights opportunities for future research and outlines the limitations of the study.

Chapter 2 The business ecosystem, strategic intent, vision and ambidexterity

2.1   Introduction

Organisations are an integral part of the business ecosystem, a dynamic operating environment. Business models are established to achieve organisations' vision and objectives to enable long term sustainability, determined by the strategising process. Such objectives may include exploiting existing products or exploring for new ideas and knowledge for innovation. Decisions to exploit or explore have different ramifications for activities undertaken and their outcomes. For instance, a strategy to explore for knowledge and innovation may trigger the formation of new collaborative ventures to align with an organisation's strategic direction. Whilst engaged in new collaborative ventures the organisation simultaneously continues to face ongoing dynamism in the business ecosystem, besides being in an unfamiliar situation. Research shows that if organisations recognise external changes and then align and adapt to these changes they are more successful competitively (Fawcett, Magnan & McCarter 2008a; Gattorna 2006; Stonebraker & Afifi 2004). In a sense this places senior managers in a paradoxical situation (Lewis 2000) where the initial purpose for a strategic action may require change for a potential future, with an unknown outcome. Integrating the dynamism of the business ecosystem with the strategic direction of an organisation is thus a complex task for senior managers.

The chapter reviews the complexities faced by senior managers. The overview of the literature and its multi-theoretical approach is first discussed. An examination of the business ecosystem follows, as this provides the context for the strategising process. The role of strategic intent and vision to provide direction and facilitate an organisation's ability to manage continuity and change are then investigated. The

practice of implementing strategic intent through coordinating mechanisms and routines concludes the discussions of this chapter.

2.2   Multi-theoretical approach and conceptual framework

The focus for the thesis is the role of strategic intent in knowledge transfer and creation in collaborative ventures. The literature review therefore encompasses three key areas strategic intent, collaboration and knowledge, which are the broad areas studied in the literature. The interest of the thesis is how better understanding of these study areas can potentially inform senior managers. An organisation's senior managers are responsible for the diverse functions, operating with multiple frames of reference that can help 'understand complex reality' (van de Ven & Johnson 2006, p. 813). Within an organisation it is usual 'that multiple functions, resources, and disciplines are necessary to transform innovative ideas into reality' (van de Ven 1986, p. 605).

Strategy knowledge is a key element of this study as the strategic actors, the senior managers, make and enact decisions in the social domain of the organisation (Chia 2004; Tsoukas & Knudsen 2002; Wenger 1998). Strategising, collaborating and creating knowledge are integral parts of research in modern management, spanning multiple fields including strategic management, international business and knowledge management. Such diverse components of modern management literature incorporate various theories. Adopting a multi-theoretical approach to the study of knowledge creation and transfer between organisations in collaborative ventures is thus a rational approach (Carlile & Christensen 2005; Christopher 2010; Denis, Langley & Rouleau 2007). No one theory can give a complete picture of a

phenomenon; theories are by necessity incomplete abstractions, consequently a 'pluralistic approach of comparing multiple models of reality is therefore essential for developing valid knowledge' (van de Ven & Johnson 2006, p. 817). Within this thesis the dynamics of organisational knowing and absorptive capacity, being capabilities, are central to the evolutionary perspective (Nelson & Winter 1982). Such capabilities are resources that contribute to competitive advantage (Barney 2001). Consequently theories of the resource-based view (Penrose 1959; Wernerfelt 1984), the business ecosystem (Moore 1993; Lewin & Volberda 2003) and dynamic capabilities (Teece et al 1997) provide the context for exploration of the concepts strategic intent, collaboration, absorptive capacity and organisational knowing. The extent to which these theories are included varies, as the thesis is contributing to preliminary theory building by connecting the key concepts and exploring relationships, rather than causal analysis (Carlile & Christensen 2005). Throughout the thesis the dynamic nature of the key concepts is central and they are approached from this perspective.

Furthermore drawing widely from the general management literature and its diverse disciplines can stimulate thinking and the development of new ideas by recombining other ideas in a new context (Bartel & Garud 2009; Boland & Tenkasi 1995). Schmalensee (2001, p. 76) concurs, observing that connecting different disciplines 'releases creativity and power that would be impossible if people had remained rooted in their original mind-set'. Thus investigating strategy practices in a pluralistic context, such as a collaborative venture, can benefit from alternative conceptual frames (Denis, Langley & Rouleau 2007), reducing the risk of 'intellectual chaos in a

field in which specialized theories dealing with specialized topics seem unrelated to one another' (Stryker 2008, p. 21).

Importantly drawing from the general management literature may assist in bridging the chasm between academics and practitioners. Academics operate at high levels of abstraction which is different to decision makers who are daily making concrete decisions and spending budgets; they are unable to wait for academics to define the terms (Schneider 2007). She continues that theory is concerned with causality whereas industry practitioners want functionality and finality; finality can be developed by 'applying black-box approaches, whereas causality requires opening the box. According to Luhmann's (2006) social systems theory, technicians need not ask the 'why' question as long as they receive satisfying results by asking the 'how' question' (Schneider 2007, p.614). In such ways 'the dual objectives of applied use and advancing fundamental understanding' can be achieved (van de Ven & Johnson 2006, p. 803). Bowman, Singh and Thomas (2002, p. 46) indicate that 'interdisciplinary research is, and should be, one of the primary, distinctive competences' of the field of strategy and strategic management research. This thesis is drawing together several distinct concepts encapsulated in the practice of strategising in a collaborative venture. Thus a multi-theoretical approach is adopted.

Incorporating a multi-theoretical approach and drawing distinct concepts from the general management literature necessitates a wide literature review. In the following review, diverse concepts are drawn together. To assist in connecting the diverse elements of this thesis, Figure 2.1 has been developed as a conceptual framework to

provide guidance throughout the literature review. The figure is simplified, to show

the key connections (Mason & Leek 2008).

Figure 2.1   Conceptual framework of the thesis
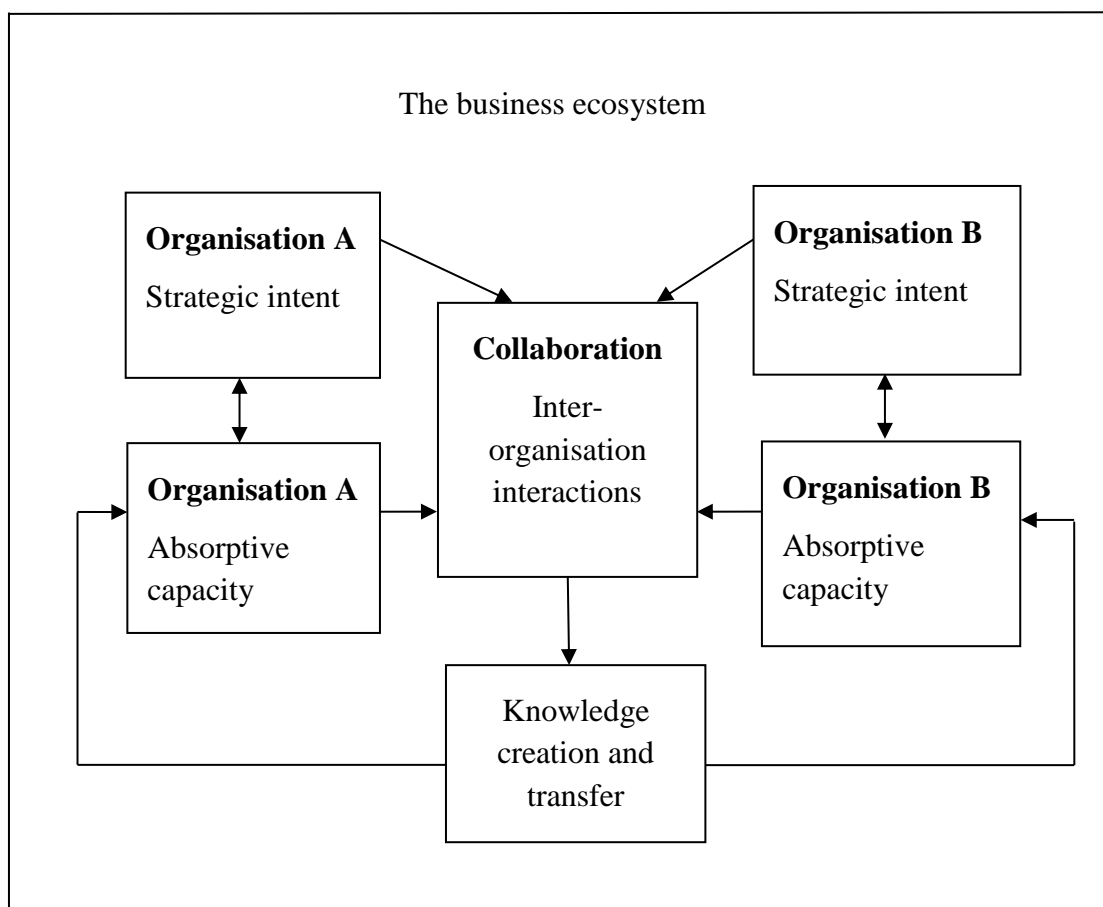
In the figure, the companies A and B form a collaboration. Collaboration is the focus

of Chapter 3. The collaboration has been selected as a strategy separately by each

organisation as part of their strategic intent, to achieve their main ambition. Strategic

intent is discussed further in this chapter. The companies and the collaboration

operate in the business ecosystem, shown in the background. The business ecosystem

contains external influences and reciprocal flows that may affect the companies

and/or the collaboration and is also discussed in this chapter. In the process of

collaborating, the companies and their personnel interact, leading to knowledge creation and transfer. The knowledge creation and transfer are assimilated through the processes of absorptive capacity in each organisation. Knowledge creation, transfer and absorptive capacity are the focus of Chapter 4.

With the conceptual framework as a guidepost, the remainder of this chapter focuses on the business ecosystem and strategic intent. The next section discusses the role of the business ecosystem and its connection to strategising.

2.3   The business ecosystem

The context of this research is collaborative ventures, which are formed as an outcome of strategic decisions. Such decisions are not created in a vacuum. They occur in a business ecosystem which affects organisations, their activities and their outcomes (Aaker 1998; Child, Faulkner & Tallman 2005; Porter 1980; Stead & Stead 2013; Trist 1989; Volberda & Lewin 2003). There is an interrelationship between the organisation and the business ecosystem, which affects the strategy and tactics appropriate for achieving organisational goals (Emery & Trist 1965; Lewin & Volberda 2003). Diverse categories constitute the business ecosystem, that all, to varying extent, influence the thinking processes, planning, implementation and the outcomes of a firm's strategic decision making. For example, an organisation's ecosystem includes competitors, suppliers and customers, which provide both dynamism and opportunity (Moore 1993). Over time there have been significant changes in understanding about key areas of the business ecosystem, particularly reciprocity of influences, the importance of industry structure and strategic renewal. These are discussed next.

2.3.1 Key influences and reciprocal flows in the business ecosystem

When considering whether or not to form a collaborative venture, the strategic decision making processes generally include an analysis of the business ecosystem to identify key influences and trends (Aaker 1998; Lawrence & Lorsch 1967b; Porter 1991; Stonebraker & Afifi 2004). Although over time the names of the influences have changed, the categories of influence represented in it are relatively consistent, such as the technological, legal, political, economic, environmental and socio-cultural influences (Blau & Scott 1962; Borden 1991; Holloway & Hancock 1964; Johnson, Scholes & Whittington 2005; Kotler, Gregor & Rodgers 1977), to which more recently can be added the sustainability consciousness (Senge et al. 2008; Stead & Stead 2013). Utilising such classifications in analysis enables ready identification and analysis of trends that create opportunities and threats to an organisation's strategic direction, aiding decision making (Porter 1980; Porter 1985).

Trends in the business ecosystem are dynamic and complex (Zenisek 1979); those in each category of influence may vary simultaneously. Creating a typology of the business environment based on degrees of uncertainty to describe its causal texture, Emery and Trist (1965) introduced the notion of a turbulent field, exemplified by complexity and rapid change (Zenisek 1979). Turbulent environments are the norm, particularly for large organisations (Terreberry 1968), Katz and Kahn (1978, p. 124) noting that each category of influence in the environment 'can vary on some of the dimensions described by Emery and Trist, such as turbulence or randomness, and each may vary independently of the others'. Berkhout and Hertin (2002) find that within a social system there are multiple, fickle drivers of change creating

environmental uncertainty, a multidimensional concept (McFarland, Bloodgood & Payan 2008), which affects strategic decision making and its outcomes.

Environmental uncertainty has been a central concept in economics and organisational theory for many decades (Conrath 1967; Dill 1958; Lawrence & Lorsch 1967b; Milliken 1987) leading to many definitions (Johnston, Gilmore & Carson 2008). Amongst the definitions there is however a commonality relating to lacks of information, knowledge and understanding and difficulties in predicting future changes (Johnston, Gilmore & Carson 2008). Such difficulties arise from the human aspect of problem solving when there are many complex variables at play, novelty, rapid change, imperfect foresight and an inability to know the consequences of decisions (Alchian 1950; Ansoff & McDonnell 1990; Conrath 1967). In such dynamic environments where senior managers are challenged in adaptive sensemaking (Bogner & Barr 2000), perceptions and thus decisions may differ.

Nowadays the notion that connections and exchange processes create interactivity and reciprocity between an organisation and the business ecosystem boundary is more widely accepted, although acknowledgement was slow to develop (Blau & Scott 1962; Terreberry 1968; von Bertalanffy 1950; Zeithaml & Zeithaml 1984). Reciprocal flows of influence of this nature within such a system 'typically defined as an entity of component parts that individually establish relationships with each other and that interact with their environment both as individuals and as a group' (Behara 1995, p. 292) provide interactivity and feedback (Senge 1990). Coevolving in this mutually dependent manner over time is a concept originally based in biology (Ehrlich & Raven 1964), subsequently expanded to include geological systems

(Lovelock 1979) and a range of disciplines including organisational sciences (Stead & Stead 2013). Organisations and their ecosystems are caught in an ongoing cycle of change with ever-increasing turbulence, resulting in organisational structures and processes that are more flexible and innovation-driven (Flier, Van Den Bosch & Volberda 2003; Lewin, Long & Carroll 1999; Lewin & Volberda 2003; Murmann 2013; Porter 2006; Stead & Stead 2013; Volberda & Lewin 2003). Reciprocity and permanence are key parts of the coevolutionary process, continuously morphing the organisation and its business ecosystem over time (Stead & Stead 2013) in an infinite dynamic spiral (Beck & Cowan 2006). Organisations and their collaborative ventures, being human activity systems, are thus dynamic, continually adapting, regulating, communicating and transforming to perpetuate their existence (Behara 1995), reflecting feedback, interdependencies and interactions with other human activity systems (Senge 1990).

2.3.2 Industry structure

Another change in understanding has occurred regarding the importance of industry structure for strategising, previously advocated as significant for example in strategic positioning (Porter 1980). Gummesson, and other strategic thinkers, are moving beyond the traditional view that the business ecosystem should be considered from an industry perspective (Gummesson 1996; Liedtka 1998; Moore 1993; Polonsky, Suchard & Scott 1997). Moore (1993) for example suggests that an organisation should view the environment as a business ecosystem which continuously evolves. Organisations are interdependent, with 'cooperative co-evolving relationships' leading to competitive advantage 'rather than exploitation of resources by an industry' (Bechtel & Jayaram 1997, p. 15). Peltoniemi and Vuori (2004, p.279)

suggest that the ecosystem is complex and self-sustaining, with 'both competition and cooperation present simultaneously.' The business ecosystem co-creates strategic benefits for all stakeholders (Ramaswamy & Gouillart 2010). Key changes in the business ecosystem, such as coopetition and technological advances, do not affect an industry in splendid isolation.

There is a growing global trend to deconstruct organisations. Vertical value chains are being replaced with specialist organisations at different stages, such as the outsourcing of logistics functions to a third party logistics provider, making clear identification of the relationship between specific industries and the business ecosystem more complex. Schweizer (2005, p. 39) indicates that 'Deconstruction can be considered as 'a melting of the glue that binds' the value chain together', freeing up the linkages. Industries are increasingly being challenged by this deconstruction (Schweizer 2005), with an increase in coopetitive endeavour. The deconstruction itself enables new practices and structures to arise as 'the deconstruction phenomenon can be considered as a necessary development and a basic condition that allows different business models to emerge' (Schweizer 2005, p. 39). Traditional definitions of businesses and industries are thus changing as businesses and industries intersect at multiple layers (Schweizer 2005); as the value-chain is deconstructed, value-adding opportunities arise for other organisations and forms such as collaborative ventures for the creation of new business in this dynamic context.

2.3.2.1 Model building

Organisations and the formation of collaborative ventures are mutually influenced, interconnected and interdependent in the business ecosystem. Strategic decision making occurs in this context. To assist subsequent analysis of the strategic drivers of collaborative ventures and the interdependencies that form, developing a model will help visualise the interrelationships and influences that are present. Analysis of the relationships of a system's components makes model building, system interrogations and simulations feasible which may generate further understanding (Lazer 1971; Senge 1990). By analysing and evaluating the hierarchy of a system's components and their interactions understanding of that system is furthered. Thus identifying, analysing and evaluating interactions and interrelationships between a collaborative venture and its business environment aids strategic decision making. To help guide the discussions that follow in this and subsequent chapters, Figure 2.1 below has been developed. The figure comprises two organisations, Actor A and Actor B, and a collaborative venture they have formed. The reciprocity and flows between these actors and the business ecosystem are shown with double-headed arrows.

Given the interrelationships shown in Figure 2.1, organisations require relevant information for strategic decision making and adaptive sensemaking about trends in an unpredictable, complex operating environment (Beal 2000; Bogner & Barr 2000; Duncan 1972; Ireland et al. 1987; Johnston, Gilmore & Carson 2008; Weick 2001). Processes can be put in place such as environmental scanning to gather data from diverse sources (Choo 2001; Haase & Franco 2011).

Figure 2.2   Reciprocal flows in the business ecosystem
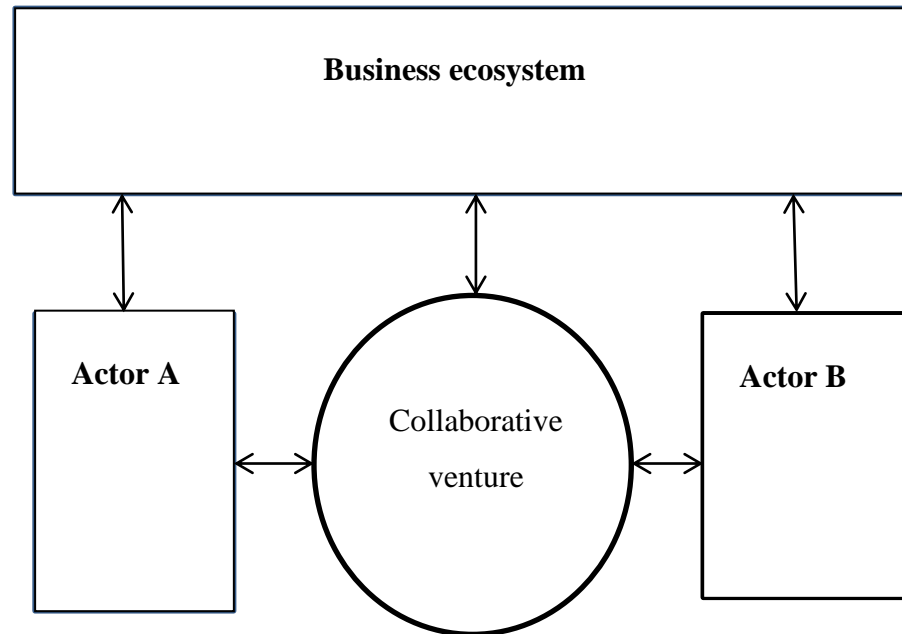
The information that is gathered from the business ecosystem is utilised in organisational strategising to achieve long-term sustainability. What is happening in the business ecosystem strongly influences strategic direction (Chrusciel 2011). Strategic direction has traditionally been regarded as a long-term view, looking some ten years or more into the future. Strategic direction is incorporated into strategy development, with strategies being established, often with timeframes of two-to-five years. Key strategic tools, such as the business model, are then used to implement the organisation's planned strategy (Ghezzi 2013). The next section introduces the strategic intent.

2.4   Strategic intent

The fields of strategy and strategic management are two complex fields significant to economic and business growth. Such significance has generated a keen interest in the fields, developing a rich academic literature in both over time (see for example seminal works by Chandler (1962), Ansoff (1965), Porter (1980; 1996), Mintzberg (1987; 1990), Aaker (1998) and a recent review of the strategy concept by Ronda-Pupo and Guerras-Martin (2012)). The centrality of these fields to modern business has resulted in a diverse academic and practitioner literature that has mushroomed. For senior managers, connecting the diversities of the literature with activities occurring in daily practice is complex.

2.4.1   A dynamic, emergent world

Increasingly the value of the resultant vast array of academic literature on strategy and strategic management to business is being questioned. For instance Ketchen, Boyd and Bergh (2008) indicate it is fragmented and lacks coherence, with Ronda-Pupo and Guerras-Martin (2012) noting that the concept of strategy itself has continually changed over recent decades and lacks consensus. Earlier Mintzberg (1987, p. 29) suggested that strategy can be considered 'a force that *resists* change, not encourages it' (emphasis in original). Schneider (2007, p. 630) observes that '[T]he strategic literature applies concepts that are too abstract and too inclusive to direct managerial action and/or allow for empirical testing.' Besides the general commentary on the value of the literature to practitioners, the previous perceived need for efficiency had encouraged strategic approaches based on stability, driving out flexibility and replacing it with rigidity (Doz & Kosonen 2010). In today's

dynamic operating environment tight, detailed planning may not be appropriate for key processes, activities and relationships (Caniëls & Romijn 2008; Choi, Dooley & Rungtusanatham 2001). For instance there is increasing interest in understanding the new product development process as being non-linear, rejecting the traditional notion of detailed planning and a sequential decision-making process (McCarthy et al. 2006). Chesborough and Appleyard (2007) note that traditional strategy views ownership and control as being key levers for success (Simons 1994), which ignore potential value creation from external resources, such as those found in open innovation systems and the organisation's networks. Recognition that the dynamic nature of strategy being practiced by managers and its future-orientation are being lost in the scientific-rationalist approaches to strategy is growing; practitioners are concerned academics are out of touch with reality (Bettis 1991; Gopinath & Hoffman 1995; Hafsi & Thomas 2005; Nonaka & Toyama 2007; Sandberg & Tsoukas 2011; Splitter & Seidl 2011). Deliberate, pre-planned strategic planning seems untenable with the business ecosystem no longer seen as predictable. Former advocates of planning are now emphasising skills such as acute awareness of the business ecosystem, agility and intelligence, with the ability to react rather than predict becoming more important (Wheatley 2006). The dynamic nature of strategy in both reacting to change and being a vehicle for change is bringing new approaches to strategy and its management.

The interest in dynamic strategy is not new. Lindblom (1959) considered the strategy process as muddling through incremental changes and decisions. Quinn (1978) with his approach of logical incrementalism thought the strategy process was more controllable, but required constant integration of changes. From these early

beginnings, the dynamic nature of strategy is increasingly considered in academic and practitioner literature (Chesbrough & Appleyard 2007; Chia 2004; Johnson, Melin & Whittington 2003; Szpakowski 2011; Whittington 2004). Nonaka and Toyama (2007) argue that strategy has traditionally been seen as linear, more as planning and less as practice, to its detriment; it has failed to see the roles of emergence and art/craft (Chia 2004; Mintzberg 1990; Simpson 1998). Moreover the earlier focus on macro-analysis and causal, linear effects results in lost opportunities. The micro-practices of strategising contain the ability to adapt to emergence just-in-time, creating a source of competitive advantage (Balogun & Johnson 2005; Chesbrough & Appleyard 2007; Chia 2004; Jarzabkowski & Whittington 2008; Johnson, Melin & Whittington 2003; Weick 2001; Whittington 2004). However adaptation to the emerging opportunities and threats needs a frame of reference, which is what strategic intent provides.

2.4.2 Strategic intent - a high level statement

In an era when the linear effects of strategy planning were dominant, Hamel and Prahalad (1989) were amongst the first to recognise the role of strategic intent, drawing on Japanese management influences (Fiegenbaum, Hart & Schendel 1996). In their understanding, strategic intent is a high level statement of how an organisation will realise its vision for the future. In their seminal article they consider that the determination of leading companies to succeed beyond their capabilities and resources is an obsession, which is strategic intent. Hamel and Prahalad (1989, p. 64) define strategic intent as 'a [sustained] obsession with winning at all levels of the organisation'. Effectively it outlines how the future will look, providing stretch goals for the organisation's members (Collins & Porras 1994; Hamel & Prahalad 1989;

Hamilton, Eskin & Michaels 1998; Kroes 2009). However it encompasses both '*the essence of winning*', '*is stable over time*' and '*sets a target that deserves personal effort and commitment*' (Hamel & Prahalad 1989, p. 64-66)(emphasis in original). Noting that the accelerating rate of change in the business ecosystem means that strategic planning is becoming more focused on shorter term plans, they consider that the 'planning process typically acts as a "feasibility sieve"' for strategies in an annual, cyclic process (Hamel & Prahalad 1989, p. 66). Hamel and Prahalad (1989) suggest that strategic intent is necessary to provide a more aspirational, long-term goal in the face of plans with short-term predictive horizons due to increasing turbulence. Underpinning their discussion is the anticipated growth of the organisation beyond current capabilities and resources, enabled by the focus of the strategic intent. Strategic intent sets the future direction, including the strategic or competitive priorities and objectives (Campbell & Yeung 1991; Hitt et al. 1995). Thus it directs the accumulation of capabilities and resources, providing 'something to 'aim' for' in a process of guided evolution (Lovas & Ghoshal 2000, p. 885). There is a degree of uncertainty about its achievability (Mantere & Sillince 2007). Table 2.1 provides a summary of the definitions of strategic intent.

As can be seen from Table 2.1 there has been some evolution in the definition of strategic intent since it was first introduced by Hamel and Prahalad (1989). Bate (2010, p. 33) elaborates further, indicating strategic intent comprises both a 'passionate core' which gives the emotion, reflecting 'what the organization values, what it finds most important' and potential future changes. Being formed at the intersection of these two components, strategic intent can be decided by studying both an organisation's own stories and thought leaders' opinions on potential

changes in the business ecosystem. He argues that it is a creative process, not an analytical one, such as that applied to most strategic planning, echoing Moncrieff (1999). Moncrieff (1999, p. 274) suggests that in the process of strategy formation, analysis is enhanced when learning and creative thinking are included to challenge managers' existing paradigms which can otherwise 'dull organizational senses'.

Table 2.1   Key definitions of strategic intent

Authors	Definition of strategic intent	Time frame
Hamel and Prahalad (1989, p. 64)	'a [sustained] obsession with winning at all levels of the organisation'	10-20 years
Hamilton, Eskin and Michaels (1998, p. 408)	'expressed through the setting of ambitious goals that both challenge and focus the resources and core capabilities of the organization'	10 years
Lovas and Ghoshal (2000, p. 882)	'the one main ambition of the firm'	Long-term
Bate (2010, p. 33)	'a strategic dream, an aspiration that can provide some sense of early direction but is not yet clear'	5-10 years
Edwards and Baker (2013, p. 28)	'discerned as an espoused set of principles or a purpose statement'	Not given
Ryals and Davies (2013, p. 112)	'an umbrella term covering a set of related constructs'	Not given

Ryals and Davies (2013) demonstrate the evolution of the term as it migrates to a different literature base. In the key account management literature, the term is considered more overarching, including the constructs 'strategic and operational fit, goal congruence, mutuality and commitment' (Ryals & Davies 2013, p. 112). In this literature, relationships are important, with a causal relationship between relationship effectiveness and strategic fit (Richards & Jones 2009). Consequently the use of strategic intent is applied in the context of the management of relationships and is closer in meaning to strategic fit. Ryals and Davies (2013, p. 117) exploring the role of strategic intent in dyadic business relationships utilised the term with this meaning, having both intentional 'shared organizational goals' and behavioural indicators, 'related to actions or developments in the relationship'. They found that strategic intent is not the key feature of the type of relationships formed and that mutual strategic intent was lacking.

The foregoing discussion from the literature suggests that strategic intent in an organisation is singular, as if the organisation is a 'monolithic entity' (Kroes 2009, 41). Kroes (2009) argues that this approach disguises the collective nature of strategic intent. He undertook a case study into one organisation in the insurance industry and followed the creation of a strategic intent through workshops with a facilitator. He finds that there are heterogeneous intents in existence creating internal social pressures at play, which were resolved by adopting Mantere and Sillince's (2007) view of strategic intent as a rhetoric device. Functioning as a rhetoric device would suggest that its role is in persuading, which is different to the guide for action inherent in Hamel and Prahalad's (1989) original definition. It may be that it appears

more as a rhetoric device while it is being created collectively, but once created its role in use is different.

This thesis investigates the role of strategic intent in knowledge creation and transfer in a collaborative venture. The definition of strategic intent offered by Lovas and Ghoshal (2000, p. 882) is adopted for this thesis, namely 'the one main ambition of the firm' which provides the objective focus for the strategy process, declaring the preferred outcome. Further the definition has been utilised as part of the development of a process model of strategy from a case study and literature (Lovas & Ghoshal 2000). The role of strategic intent is explored in the next section.

2.4.3   The role of strategic intent

The role of strategic intent within an organisation has several purposes, which overlap. Figure 2.2 provides a simplified diagram of the role of strategic intent.

Firstly given dynamism and turbulence of the business ecosystem, organisations need a clear idea of 'what they are trying to accomplish' to avoid being tossed around (Wheatley 2006, p. 39). Strategic intent provides overall direction, keeping the organisation on track. It operates as a rhetorical device, 'a symbol of the organization's will about the future' (Mantere & Sillince 2007, p. 3). Secondly it is the driving force behind many key business decisions, such as a desired marketplace position for strategic advantage. Strategic intent assists in developing the criteria that are utilised to guide and measure progress and the active management processes to achieve goals (Hamel & Prahalad 1989; Szpakowski 2011). Szpakowski (2011, p. 2)

indicates that 'A good strategic design is elegant in its simplicity, with well-defined parameters, clarity of purpose and success factors'.

Figure 2.3   The role of strategic intent
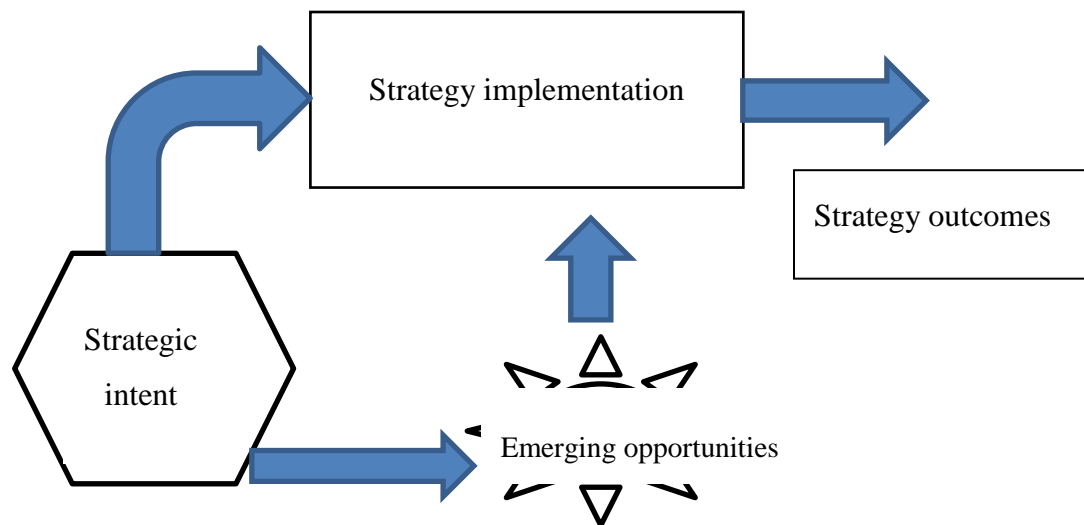
Source: Adapted from Moncrieff (1999, p. 274)

Furthermore strategic intent provides a reference point for alignment (Fiegenbaum, Hart & Schendel 1996). Doz and Kosonen (2010) argue that developing strategic agility in the top leadership team enables renewal and transformation of business models through meta-capabilities of strategic sensitivity, leadership unity and resource fluidity. Critical elements of these meta-capabilities are alignment around a common interest and imagining new business models, reframing the existing business model (Doz & Kosonen 2010). Strategic intent enables the development of the exploration and transition rules for how an organisation will migrate from its current business model to a new one through alignment. According to Itami and Nishino (2010) there are two components in a business model, the profit model and the business system. Strategic intent is core to the former, which shows how the

organisation will achieve differentiation and thus earn profits in the marketplace. The business system is put in place to enable the realisation of profit through strategic intent. Significantly however, it also enables new learning capabilities through its design of work flows and information systems (Itami & Nishino 2010). Such learning can then form the basis for future design configurations and growth potential.

Additionally strategic intent is temporally distanced from present day actions. Due to the preponderance of the linear approach to strategy, strategic intent is frequently established as a major part of strategic planning. A disconnection between now and the future may create a problem to be solved by the strategy process by supporting the emergence of knowledge creation and its assimilation to enable new opportunities to be realised (Hamel & Prahalad 1994). Moreover the emergence of opportunities and threats in the business ecosystem is partly driven by the innovation derived from new knowledge created through social interactions (Aramburu, Sáenz & Rivera 2006; Mintzberg 1990). Such knowledge has to be both recognised as being potentially of value and duly assimilated through an organisation's processes to corporate strategy to contribute to innovation and value creation (Barr, Stimpert & Huff 1992). Strategic intent is critical in that it can both facilitate emergence and also enable that which is emerging to be noticed, assimilated and utilised. Adapting to emergence needs to be a key part of an organisation's strategy as it is about creating a future for itself (Jansen, Cammock & Conner 2011; Mintzberg & Hunsicker 1988).

However strategic intent may smother new ideas in the interests of what is planned (Easterby-Smith et al. 2008). For example the core rigidity which trapped Texas

Instruments into being a low-cost provider of handheld calculators when the market changed to product differentiation led to the organisation missing opportunities (Hill & Jones 2005). Additionally the significance of strategic intent to outcomes can also be seen in the 1970s when Xerox Corporation focused on exploring photocopier innovations and failed to capitalise on breakthrough innovations in computing software and hardware, such as the mouse, graphical user interface and the first personal computer (Chesbrough & Rosenbloom 2002; Doz & Kosonen 2010). Strategic intent enables an organisation to achieve, but without factoring in dynamism and emergence to that intent, there is a risk it may stifle flexibility, agility and adaptability in a dynamic environment.

Finally, endeavouring to adhere to their strategic intent, organisations may be faced with strategic complexity and ambiguity for their operations (Doz & Kosonen 2010; Smith, Binns & Tushman 2010). For example strategically managing a collaborative venture is a complex strategic task in itself. To also be simultaneously recognising and assimilating continually emerging created knowledge from interactions in the collaborative venture adds complexity to the senior manager's task. Besides the complexity, there is what Chia and MacKay (2007, p. 228) claim is 'an epistemological assumption' about the intentionality of human action in strategy-making (Hendry & Seidl 2003). If strategy can emerge from the responses of a strategist to changes in the business ecosystem unselfconsciously that is retrospectively deemed to be strategic then 'deliberate intentionality is not a prerequisite for the articulation of a strategy' (Chia & MacKay 2007, p. 228). Emergent strategies are those that 'appear without clear intentions – or in spite of them' (Mintzberg & Hunsicker 1988, p. 79). Mintzberg (1988, p. 80) suggests that

'Deliberate and emergent strategies form the end-points of a continuum'. Without intentionality, agency is removed from the centre of strategic analysis, replacing it with the transmission of strategy practice.

Although conceptually strategy simplifies reality and strategies are developed to reduce uncertainty and provide inspiration, generally strategic management principles are based in stability (Doz & Kosonen 2010; Hay & Williamson 1997; Mintzberg 1987; Teece 1984). Such underpinning assumptions make investigating the role of strategic intent nowadays of interest, particularly its relevance in strategy dynamics. Despite the frequent usage of the term strategic intent throughout the academic and practitioner literature, there appears to be a paucity of empirical research into its role, definition or antecedents and outcomes in business and management disciplines. The previous discussion on the role and complexity surrounding strategic intent and the keen interest in best ensuring sustainable competitiveness through strategising, there remain many opportunities to further explore strategic intent.

Strategic intent is that part of the strategy formulation process that gives direction within organisation planning. Another component is organisational vision, which appears to have many similarities in use that of strategic intent. To clarify similarities and highlight differences, organisational vision and its connection with strategic intent is explored subsequently.

2.5   Organisational vision

There is a general consensus that vision is a guide for intentional action (refer to (Child & Smith 1987; Christenson & Walker 2008; Collins & Porras 1996; Ford & Ford 1995; Hamel & Prahalad 1994; Hay & Williamson 1997; Kantabutra 2008b; Lipton 1996; Sidhu 2003; van der Helm 2009)). Understanding what is meant by the term vision is less clear. Over 20 years ago, Collins and Porras (1991, pp. 32-33) noted 'words used to describe the process of providing direction to an organization have been under-defined and confused with each other', a view echoed by Cummings and Davies (1994). There appears to have been little progress, with strategic vision, vision and organisational vision appearing in the academic and practitioner literature with little to differentiate their meaning or usage (Kantabutra 2008b). Similar to strategic intent, these terms also appear to lack empirically tested definitions or a theoretical framework for research. With vision research crossing many academic and practitioner domains, this is unsurprising (van der Helm 2009).

2.5.1   Understanding organisational vision

Similar to strategic intent the literature focuses more on the role of an organisational vision, than defining terms. However there is a richer literature and more empirical testing in comparison to that found on strategic intent. Cummings and Davies (1994, p. 147) for example commenced with the etymology of the word vision to arrive at a definition of 'a notion of the future which can provide something to anticipate and aim towards or away from'. Many scholars have offered similar definitions focusing on preferred future outcomes that are consciously chosen and improve present circumstances (such as (Baum, Locke & Kirkpatrick 1998; Collins 2006; Conger &

Benjamin 1999; Nanus 1996)). O'Connell, Hickerson and Pillutla (2011) note that a definition of vision may also include emotional appeals and values (Frese, Beimel & Schoenborn 2003; Zaccaro & Banks 2004b). Other scholars add some form of boundary to these core definitions. Raynor (1998, p. 371) for example qualifies his definition of organisational vision as 'the desired future position of a company within its area of competition'. All are linked to effecting intentional action, in which Lipton (1996, p. 85) includes 'what the organisation will do in the face of ambiguity and surprises'. Summarising the literature, Kantabutra (2008b) finds there are four organisational characteristics shared amongst the definitions of vision. Organisation vision is seen as a desired future state, providing a sense of direction, necessary for leadership to induce action and of importance to business strategy and planning.

Another approach to understanding vision came from its links to leadership. In the late 1980s elements of strategy and leadership were combined into the concept of strategic vision, which was seen as the key to managing complex organisations (Westley & Mintzberg 1989). Critical to strategic vision is the envisioning of a desired future state by the leadership, which is then conveyed to empowered employees to enact (Oswald, Stanwick & LaTour 1997). Image theory indicates that the strategic vision helps employees create a frame for their perceptions to aid decision making (Beach 1990). The strategic vision is thus a representation of the future that guides decision making and generates commitment to the organisation (Collins & Porras 1991; Morris 1987). Frequently the success of an organisation's leader is attributed to his or her vision, particularly in the visionary leadership paradigm (Avery 2004; Humphreys 2004; Westley & Mintzberg 1989). Hence strategic vision was linked to leadership. However this thesis is not exploring

strategic vision in the sense of its association with leadership. Consequently the boundary placed around the terminology is that any use of either organisational vision or vision is in the context of an organisation, regardless of whether at the individual, group or organisational level (van der Helm 2009).

Collins and Porras (1991, p. 32) indicate organisational vision 'is an over-arching concept under which a variety of other concepts are subsumed'. Their organisational vision framework encompasses core ideology and an envisioned future (Collins & Porras 1994). Core ideology is self-identity, remaining consistent over time and transcending short-term fads and changes in leadership in the organisation. It comprises core values and purpose, the latter being regarded as long-lasting, unchanging and not-realisable. Envisioned future is for a shorter time-frame, some 10-30 years, which has an inherent duality of being aspirational, but also credible, something that may be able to be achieved. This big, hairy, audacious goal at the organisational vision level stretches current capabilities and is in itself a little visionary (Collins & Porras 1994). It is in this sense of an overarching term that the majority of vision definitions seem to fall.

2.5.2 The role of organisational vision

The similarities between the organisational vision terminology in use and strategic intent become more apparent when investigating the role of organisational vision. For example organisational vision is often considered a guide for intentional change, requiring both intentional action and an a priori specified outcome. Generally an organisational vision precedes any specific strategic planning (Child & Smith 1987; Kantabutra 2008b; Lipton 1996; Millett 2006; Nanus 1996; Senge et al. 2005; Senge

1990; Zaccaro & Banks 2004a). The organisational vision is commonly acknowledged as a driver of change (O'Brien & Meadows 2007; Senge 1990), affecting growth in entrepreneurial organisations (Baum, Locke & Kirkpatrick 1998), organisational performance (Kantabutra, 2008b) and the effective leadership of change management (Zaccaro & Banks 2004a). The organisational vision creates a shared understanding (Schatzki 2001) which regulates strategy practice, shaping strategists' outlooks and can 'predispose actors towards particular strategic choices of action' (Chia & MacKay 2007, p. 228). Moreover Slack, Orife and Anderson (2010) in their surveys linking organisational vision and employee satisfaction found that organisations with management commitment to the organisational vision had higher levels of employee satisfaction. They posit this may increase overall organisational commitment to the organisational vision (Giblin & Amuso 1997; Lahiry 1994). Managerial commitment to an organisation is the degree to which organisational values and goals are adopted and identified with in undertaking daily responsibilities and activities (Tanriverdi 2008). Higher management commitment may thus increase the outcomes and alignment between senior strategists' choices and the organisation's vision.

Underpinning these roles for the organisational vision is an assumption that the organisational vision is developed, subsequently leading to the outcomes. Porras and Silvers (1991) suggest organisational vision can also be the outcome of an organisational transformation process. Christenson and Walker (2008) concur from their study of three case studies in project management, adding that organisational vision enables integration across disparate systems and aligns subsidiary projects with the strategic direction of the organisation.

Hay and Williamson (1997) and Millett (2006) taking a slightly different approach indicate that organisational vision has both external and internal dimensions. Using the term more in the sense of how the world is, external organisational vision encompasses what is happening in the marketplace, driving customers and competitors. This external organisational vision is a snapshot of what is, providing the organisation with a map of the landscape in which it currently operates (Hay & Williamson 1997). Millett (2006) adds futuring to this, a concept which frames expectations of the future, identifies emerging opportunities and anticipates actions to promote wanted outcomes. He suggests futuring is looking at least ten years ahead, to ensure it is not possible to make linear projections and assumptions based on recent historical trends. However in terms of the internal aspects of organisational vision these authors diverge, with Hay and Williamson (1997) taking the traditional view that it expresses values and guiding beliefs to determine how the organisation will develop into the future, the capabilities it requires and what it will become over time. In contrast Millett (2006) suggests that internal factors form a resource base from which the business will grow in the future; the organisational visioning process appears to be developing goals, strategies and plans. Millett's (2006) term futuring is used in the same sense other scholars' use when talking about organisational vision. However Bate (2010) argues that organisational vision statements have often become more short-term oriented, being used to inspire and motivate personnel towards achieving the current strategic plan.

Organisational vision is a necessary part of strategy as it is commitment to that vision which enables strategy (Child & Smith 1987; Hay & Williamson 1997; Nonaka & Toyama 2007) and managers to be more effective in their roles (Sabath & Fontanella

2002). A common purpose, such as a shared organisational vision, enables knowledge creation (Brännback 2003) and transfer (Inkpen & Tsang 2005; van Wijk, Jansen & Lyles 2008) by facilitating a common system of meaning and understanding of collective goals (Nahapiet & Ghoshal 1998; Tsai & Ghoshal 1998). Having a shared organisational vision, organisational personnel are more willing to consider diverse and often opposing views (Subramaniam & Youndt 2005) and are more likely to be able to reduce high ambiguity and establish coordination (Ouchi 1980), Organisational vision has a role in organisational transformation as it 'provides a clear sense of direction but which is in advance of any specific planning' by giving an 'image of the future' (Child & Smith 1987, p. 585). Effectively organisational vision forms a global reference point that guides actions to generate value (Aramburu, Sáenz & Rivera 2006). Doz and Kosonen (2010) show that KONE Corporation redefined itself from being an elevator and escalator provider to a People Flow™ solutions company. The organisational vision is central to that new portrayal of its strategic direction.

Simon, Kumar, Schoeman, Moffat and Power (2011) note that a set of strategic capabilities, including organisational vision, adaptability and flexibility can lead to organisational success. Organisations need flexibility to operate in today's dynamic business environment, in which neither the future nor the actions necessary to survive into the future are known. However having a common organisational vision and a 'repertoire of professional routines that can be applied contingently' helps build in flexibility (Schneider 2007, p. 622). For structurally differentiated business units Burgers et al. (2009) recommend to managers that a shared organisational vision is critical to ambidexterity to ensure the most effective outcomes for the

organisation. In particular, this provides a boundary and guidance for exploratory activities (Burgers et al. 2009). Such organisational visions may provide an imaginative, forward-looking logic to aid strategic decision making when experience or information are lacking (Gavetti & Levinthal 2000).

Nonetheless many issues associated with the role of organisational visions are left unanswered (O'Connell, Hickerson & Pillutla 2011; van der Helm 2009). If senior managers appear to have diverse purposes for using organisational visions, it is difficult to determine if they are deemed successes or failures. Senior managers are organisational vision champions who can communicate the organisational vision and its components for planned change, namely cause, purpose and intent, throughout the organisation. They can facilitate it becoming a shared organisational vision, acting as a catalyst for the planned change (Christenson & Walker 2008) and reducing the risks of fragmented ideas not cohering into a viable business model (Doz & Kosonen 2010). However if their interpretation and replication of the organisational vision is incorrect, it can result in loss of competency and unintended outcomes (Lovas & Ghoshal 2000). Moreover there need to be mechanisms in place to record and subsequently evaluate outcomes. However it is unlikely to be objective, making the allocation of resources to align with the organisational vision difficult. There is little to advise senior managers how to move from the organisation vision to action.

Comparing the two terminologies and roles the similarities between strategic intent and organisational vision are apparent. Both provide guides for strategic decisions and future direction, generally considered to be a minimum of ten years ahead. The role of senior managers as catalysts is central. Moreover as Mintzberg and McHugh

(1985) note for both strategic intent and organisational vision, the intentions of an organisation's senior managers may not be actualised. How senior managers mobilise their intentions will affect the interpretations of other managers in the organisation. These interpretations are often reliant on how senior managers frame the planned outcomes of strategy (Child & Smith 1987; Ford & Ford 1995; Gioia & Chittipeddi 1991; Jarzabkowski 2008), for example in organisational vision statements. Although research demonstrates that senior managers' can successfully shape interpretations of strategy through their actions, organization members may be slower to adopt the revised interpretations. Jarzabkowski (2008) argues this can result in unintended strategy consequences (Balogun & Johnson 2005), organisational dissonance (Blackler, Crump & McDonald 2000) and failure of new strategies (Maitlis & Lawrence 2003). Jarzabkowski (2008, p. 622) suggests that these outcomes arise as the new meanings are not being 'mobilized in collective strategic action'.

Further there is imagery associated with organisational vision, allowing for various interpretations. How they are projected effectively frames the problem domain from that point on (Minsky 1975). Of necessity both are bounded by the dominant beliefs that created them and the consequently established structures and routines for enactment (Cohendet & Llerena 2003). What is not apparent is how organisational visions are adapted to reflect the dynamism in the market place, nor the length of the actual time frames placed upon them mentally. Organisational vision is more than strategic intent; there are values and emotional appeals included. And this is one of the key differences between the two terms.

Another key difference is that strategic intent can be considered objective and consequently measurable (Lovas & Ghoshal 2000). There is a better fit then with the psychological interpretation of intention, as 'the determination to perform certain activities or to bring about a certain future state of affairs' (Bandura 1986, p. 467). Strategic intent 'defines the objective function of the strategy process' which is optimising the organisation's long-term performance (Lovas & Ghoshal 2000, p. 885). It therefore forms an integral part of an envisioned future, but as the objective element, the central strategic goal (Collins & Porras 1994). The linkage between strategic intent as central to an organisation's vision is depicted in Figure 2.3. Strategic intent, outlined in a solid line, has an objective part, which overlaps with the objective component of organisational vision, outlined with the dashed line. However strategic intent has measures associated with it, whereas the organisational vision has values and emotional appeals, often shown as a visual representation. Strategic intent is a central part of the strategy development and implementation process, providing the long-term perspective for guiding strategies that are usually developed for two or three years and enacted through short-term annual plans with tactics. Being measureable, strategic intent is an integral part of the strategy development process and thus frequently considered by senior management. Within the figure, strategic intent and organisational vision are placed in the context of the business ecosystem, as this will influence both organisation vision and strategic intent.

Figure 2.4   Overlap of strategic intent and organisation vision
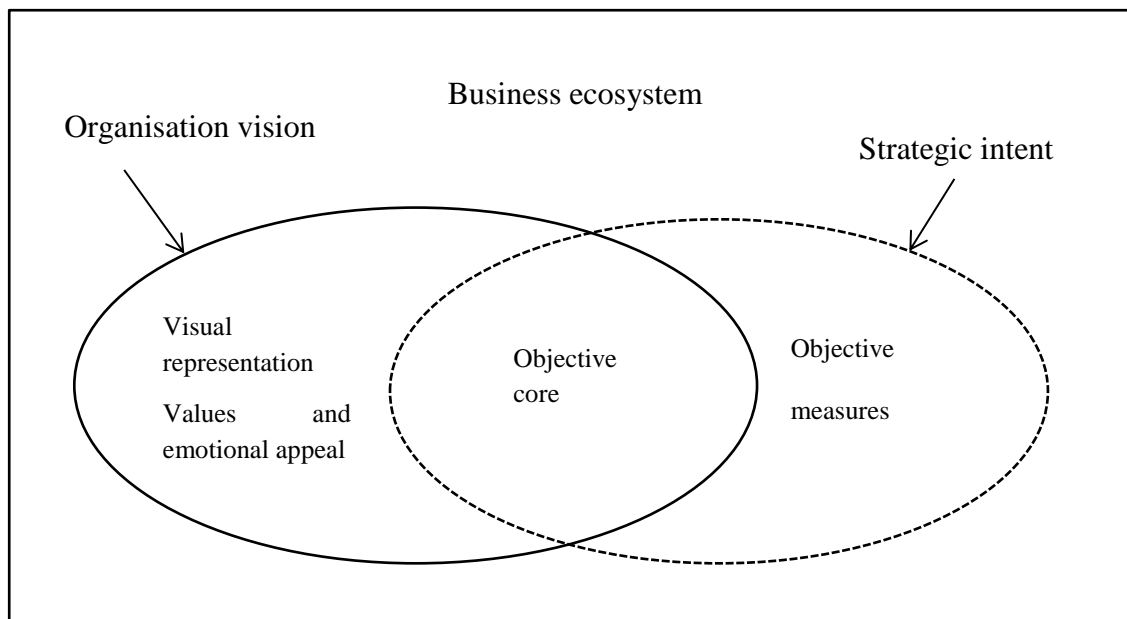
Both strategic intent and organisation vision were terms introduced when the strategy process was considered linear. With increasing recognition of the significance of strategy dynamics, terms that are able to be utilised in strategy dynamics without confusion are necessary. Once developed, they have a critical role within the organisation, yet seem to lack basic foundations to enable their effective application in collaborative ventures. In summary, strategic intent appears to be a concept that requires further study for clarification of its terminology, elements, assumptions and temporal limitations so they can be utilised more effectively in collaborative ventures.

Strategic intent is long-term and established as an objective outcome of the strategy process. However over time, senior managers are faced with many strategic choices relating to resource allocation for example. Often such strategic choices are between exploring for new opportunities and exploiting existing capabilities. In a

collaborative venture, with opportunities for access to new knowledge, the role of strategic intent for senior managers is of interest to this thesis and is the focus of the next section.

2.6   Organisational and managerial ambidexterity

Organisational ambidexterity, being the paradox of continuity or change in terms of managerial intentionality, is connected to decisions regarding an organisation's strategic direction. It enables mindful adaptation and also challenges widely-held assumptions that innovation and efficiency are mutually exclusive (Corso & Pellegrini 2007; O'Reilly & Tushman 2008). The central issue of ambidexterity is trade-off decisions relating to exploiting existing sources of profit and/or configuring organisational resources to explore, create and realise new opportunities for future viability. Such decisions create a paradoxical situation for senior managers (O'Reilly & Tushman 2008; Rothaermel & Alexandre 2009). By engaging with the inherent contradictions in exploration and exploitation a virtuous cycle can be instigated, building dynamic and creative opportunities (Lewis 2000), enhancing innovation and organisational renewal (Smith, Binns & Tushman 2010; Tushman et al. 2010). Organisational ambidexterity is increasingly seen as a major reason why some organisations will survive in a world where business longevity is not the norm (Andriopoulos & Lewis 2009; O'Reilly & Tushman 2011; Raisch et al. 2009; Stubbart & Knight 2006).

2.6.1 Organisational ambidexterity

Organisational ambidexterity is recognised as a key capability, albeit complex. Complexity arises from managing assets and market positions for two core purposes that have different requirements, timeframes and financial outcomes, creates tensions within organisations and for their managers (March 1991). Previously these were viewed with the logic of exclusion, that is managing the dilemmas of trade-offs between either exploring or exploiting (Andriopoulos & Lewis 2009; Lewis 2000; Lüscher & Lewis 2008; Nasim & Sushil 2011). Adopting this perspective yields managerial activities and academic research into either exploration or exploitation, such as Burns and Stalker (1961) with suggestions that simultaneity is impossible (McGill, Slocum & Lei 1992; Raisch & Birkinshaw 2008).

Recognising that managers need to balance such contradictory tensions (Adler, Goldoftas & Levine 1999; Brown & Duguid 2001), academic research has shifted from managing exclusion and thus trade-offs to managing inclusion and paradox (Eisenhardt 2000; Lewis 2000; O'Reilly & Tushman 2008; Quinn & Cameron 1988). This alternative view, the logic of inclusion, is now the more dominant management perspective to enable organisational long-term survival and success (O'Reilly & Tushman 2008; Smith & Tushman 2005). From the perspective of inclusion, exploration and exploitation activities are operating concurrently; change may be continually occurring. Change is thus not part of a linear continuum, with a before and an after state.

Smith, Binns and Tushman (2010) explored organisational ambidexterity in top managers and senior teams, working in business units. Each business unit had a

separate, distinct business model either for exploration or exploitation. They found commitments to an overarching vision and active learning at multiple levels enhanced by supportive team processes enabled ambidexterity. Paradoxically competing within an organisation for scarce resources and subsequent market share is but one contradictory strategic demand managers' face; others include for example choosing between stability and agility (Doz & Kosonen 2010) or learning and performance (Itami & Nishino 2010) all of which may impact an organisation's strategic direction. Managerial ambidexterity is therefore also critical to an organisational.

2.6.2 Managerial ambidexterity

An organisation cannot be ambidextrous without ambidexterity being an attribute of its senior teams and managers (O'Reilly & Tushman 2004; Smith & Tushman 2005). There is then a distinction between an ambidextrous organisation and an ambidextrous manager. Although research into the perspective at the level of the individual manager is rare (Gupta, Smith & Shalley 2006; Mom, van den Bosch & Volberda 2009; Rothaermel & Alexandre 2009), the importance of looking at this level of analysis is indicated by the contribution of individual managers to an organisation's capacity to be ambidextrous, for instance through judgements that balance the conflicts between exploration and exploitation through their daily activities and decisions (Napier, Mathiassen & Robey 2011). Rivkin and Siggelkow (2003) find that organisations need to balance search and stability in terms of sets of decisions and that senior managers still need to provide oversight in the decision making processes. Adler, Goldoftas and Levine (1999) in their study of Toyota production systems indicate that managers without ambidextrous senior teams and

managers will find it more difficult to encourage innovation and employee empowerment through productive policies and practices; critical though are the contextual factors of training and trust.

At the individual level, ambidexterity can be defined as 'a manager's behavioral orientation toward combining exploration and exploitation related activities within a certain period of time' (Mom, van den Bosch & Volberda 2009, p. 812). Ambidextrous managers can host contradictions, multitask and further develop and enhance their knowledge, skills and expertise (Birkinshaw & Gibson 2004; Floyd & Lane 2000; Hansen, Podolny & Pfeffer 2001; Sheremata 2000; Smith & Tushman 2005). From a practice perspective, it becomes important to know how an organisation can foster ambidexterity amongst its senior personnel.

From an organizational perspective, stimulating individual manager's ambidexterity increases organisational ambidexterity, by combining key elements in the context. Sheremata (2000) indicates that ambidexterity is fostered by developing and coordinating both centripetal forces, such as cross-functional teams and connectedness and centrifugal forces, including decentralised decision making and free-flowing information. Gibson and Birkinshaw (2004) stress that soft elements enable ambidexterity such as performance management, personal relationships and organisational vision, which stretch personnel and contribute to developing skills. What is important is that once strategic direction is provided by the intent, there is organisational alignment between activities and coordinating mechanisms to provide coordination. These are discussed in the next sections.

2.6.3 Alignment

Alignment, or strategic fit, is fundamental to both competitive advantage and its sustainability (Kathuria, Joshi & Porth 2007; Porter 1996; Venkatraman & Camillus 1984). March (1991) argues organisational alignment between exploitation and exploration is important to avoid competency traps and endless cycles of search with no ability to financially recoup and benefit from such search (Leonard-Barton 1992; Volberda & Lewin 2003). Alignment is the shorthand term used for consistency, or fit, between the priorities of the overall organisational strategy for any one time period and the priorities of different functional departments or business units (Rumelt 1979). Alignment is emphasised when matching internal capabilities and external opportunities and threats, such as in SWOT analyses (Andrews 1971; Ansoff 1965; Bowman, Singh & Thomas 2002). Alignment has a dual role, being vital to both formulating strategies and their implementation; it is a mutually supporting element (Miller 1986, 1987; Porter 1996). However alignment is a double-edged sword; it may bring risks of rigidity which can be counterproductive (Kathuria, Joshi & Porth 2007; Pascale 1999). The ability to manage alignment by flexible and adaptable configuring of an organisation may be the key to competitive advantage, as shown by the outcomes of Shell's successful Design by Emergence project (Miller 1996; Pascale 1999). Maintaining alignment yet being flexible creates tension, which Pascale (1999) indicates is solved by an adaptive system. Coordinating mechanisms have a key role in this process and are discussed next.

2.6.4 Coordinating mechanisms

Within an organisation there is a range of mechanisms that can enable a manager to control, integrate and coordinate activities to ensure achievement of goals (Burgers et al. 2009; Child 1972; Lawrence & Lorsch 1967a; Mintzberg 1983; Turner & Makhija 2006). Although organisations may generate creative actions from the ideas and knowledge of individuals, it needs structures and processes to integrate them into collective action (Galbraith 1973; Lawrence & Lorsch 1967b; Sheremata 2000; Turner & Makhija 2006; van de Ven, Delbecq & Koening 1976). Coordinating mechanisms have been defined in a variety of ways such as routines and procedures (Makhija & Ganesh 1997), complex processes to coordinate activities (Eisenhardt & Martin 2000; Tushman & Nadler 1978) and cultural norms and practices (Floyd & Lane 2000). Being stored as behavioural capacities or capabilities (Hodgson & Knudsen 2004), they rely on existing knowledge, linear execution and repetition (Eisenhardt & Martin 2000) and have both performative and ostensive parts (Feldman & Pentland 2003; Pentland & Feldman 2008) that can build capabilities (Dosi, Nelson & Winter 2000). They can be categorised into either vertical or horizontal mechanisms and may be formal or informal (Child 1972; Daft & Lengel 1986; Edström & Gaibraith 1977; Jansen, Van Den Bosch & Volberda 2006; Lawrence & Lorsch 1967a; Martinez & Jarillo 1989; Tsai 2002; Zahra & George 2002). Formal integrative mechanisms tend to be less flexible than informal mechanisms (Daft & Lengel 1986; Martinez & Jarillo 1989; Zahra & George 2002). In a collaborative venture they are likely to be predominantly horizontal mechanisms.

Coordinating mechanisms describe the daily practices of managers and can be considered an organisation's usual and foreseeable behaviour (Becker 2004; Jensen, Poulfelt & Kraus 2010; Nelson & Winter 1982; Nonaka & Reinmoeller 2002). As such they can be used to alter existing patterns of activities and accommodate emerging strategies (Cohendet & Llerena 2003; Nonaka & Reinmoeller 2002; Simons 1987; Simons 1994). Routines are however ambivalent as they support various functions simultaneously, for instance activating a learning process and coordinating actions (Cohendet & Llerena 2003). Additionally they assist an organisation to capitalise efficiently on both explicit and tacit knowledge when coupled with a learning dimension for strategic renewal (Jensen, Poulfelt & Kraus 2010; Nonaka & Reinmoeller 2002). Although having a critical role in the flow of knowledge and its acquisition, dissemination, interpretation and use in achieving organisational goals (Hopwood 1996; Turner & Makhija 2006), they can prevent exploration and the creation of new meaning by their very role in encouraging repetitive actions, rules and standardisation (Nonaka & Reinmoeller 2002).

Incentivising organisational members' behaviour to achieve goals is a key capability of coordinating mechanisms (Anthony 1965; Makhija & Ganesh 1997) in addition to their inherent information processing capabilities (Grant 1996; Nelson & Winter 1982; Ouchi 1980; Tushman & Nadler 1978). However operationalising routines for innovation is difficult (Pavitt 2002) and routines may be counterproductive, locking in old ideas and ways of doing business (Leonard-Barton 1992; Nelson & Winter 1982), leading to path dependency and/or inertia (Teece, Pisano & Shuen 1997). Organisational success from particular competences is frequently founded on actions that are taken when a routine is implemented to commit to a new project or idea

(Nystrom & Starbuck 1984), such as a collaborative venture. Over time these routines can lock the competencies into becoming core rigidities, which can lead to self-destructive outcomes (Leonard-Barton 1992). Jensen et al. (2010) in their case studies for instance find that managerial routines severely hamper innovation in professional service organisations; additionally if dilemmas arise requiring innovative solutions the actors tend to focus on reconfiguring exploitable knowledge. Developing support for innovative managerial routines is critical (Jensen, Poulfelt & Kraus 2010). Further reflection into the links between actions and outcomes, particularly through critical learning opportunities can unlearn the routines (Nystrom & Starbuck 1984).

Strategic intent can be considered an informal organisational integrative mechanism, contributing to the achievement of strategic coherence and integration across diverse business units (Burgers et al. 2009). In a collaborative venture it provides a collective frame of reference and is necessary to create mutual understanding (Tsai & Ghoshal 1998), effective communication (Tsai & Ghoshal 1998), facilitate knowledge exchange and combination (Nahapiet & Ghoshal 1998) and compensate for structural differentiation in what is effectively a loosely-coupled system (Orton & Weick 1990). Additionally it will assist senior managers recognise the value of potential knowledge sources (Sinkula, Baker & Noordewier 1997) and enable innovation from disparate thought worlds (Dougherty 1992).

Although there is some research on routines and control systems in inter-firm relationships, it is limited (Caglio & Ditillo 2008; Park & Russo 1996) despite their enhancement of collaborative outcomes (Zollo, Reuer & Singh 2002). Additionally

the outputs of knowledge creation in collaborations for innovation can appear unmeasurable and unobservable using traditional measures, leading to cognitional complexity (Caglio & Ditillo 2008). In a collaborative venture with various strategic intents present, the interplay and effects between strategic intent, informal coordinating mechanisms and organisational agents, such as senior managers, currently appears relatively unknown.

The structures and processes created by coordinating mechanisms and alignment contribute to an organisation's dynamic capabilities. Managing ambidexterity in the context of a collaborative venture is part of dynamic capabilities, which are introduced in the following section.

2.6.5   Dynamic capabilities

Dynamic capabilities are 'the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments' (Teece, Pisano & Shuen 1997, p. 516). Effectively dynamic capabilities transform existing resources, creating new sources of competitive advantage. Schotter (2009, p. 151) clarifies that 'capabilities have a direct impact on firm performance, while knowledge, both tacit and explicit, without specific operationalization, do not'. Actors, structures and systems, physical resources and culture are all integral components (Eisenhardt & Martin 2000; Fox & Urwick 1973; Helfat & Peteraf 2003; Teece & Pisano 2003). For example, the organisation's structure, systems and resources need to support the drive to achieve the goals and objectives, particularly in the context of dynamic capabilities (Teece, Pisano & Shuen 1997). There are thus many types of dynamic capabilities, including organisational learning and

management practices (Schotter & Bontis 2009; Teece & Pisano 2003). Verona and Ravasi (2003, p. 600) argue that building dynamic capabilities allows 'the simultaneous and continuous creation, absorption and integration of knowledge' as 'it is the *co-presence*, that is the *conjoint* use of knowledge creation, absorption, and knowledge integration' which is fundamental (emphasis in original). Dynamic capabilities are 'the interplay of knowledge and knowing in a specific context' (Schneider 2007, p. 630). A new logic is thus created for the organisation, fundamentally through knowledge creation (Brännback 2003).

O'Reilly and Tushman (2008, 2011) make the connection between ambidexterity and dynamic capabilities, which they suggest is theoretically compelling, but little researched at this stage. In their view, the ability of senior managers to both sense changes in their competitive domain and act on opportunities by reconfiguring resource allocations is critical for dynamic capabilities. Ambidexterity then is a dynamic capability that embodies both a complex set of routines, strategic intent and the ability of senior leadership to balance and orchestrate the complex trade-offs (O'Reilly & Tushman 2008). Through dynamic capabilities, knowledge is created. Such specialisation is unique and creates a core competitive advantage, yet how this is done is little known (Adler, Goldoftas & Levine 1999). Senior managers are a central element in the processes of dynamic capabilities and knowledge creation. The role of their mindsets as part of this process is introduced below.

2.6.6   Managerial mindsets

Operating at the boundary of another organisation in a collaborative venture, senior managers are faced with unfamiliarity, complexity and ambiguity (Leung 2013;

McKinley 2011; Yoshino & Rangan 1995). For example that unfamiliarity that arises with two organisations operating together for a joint purpose can lead to ambiguity. Complexity is inherent in the boundary spanning role itself and ambiguity in their decision making as the collaboration evolves and managers' roles change (Leung 2013; Tushman 1977). When organisations are operating in unfamiliar territory, managers devote more time to constructing the environmental states and the objects in it, for example through enactment, to resolve ambiguity (Barley & Tolbert 1997; Berger & Luckmann 1967; McKinley 2011; Orlikowski 2000; Weick 1979; Weick, Sutcliffe & Obstfeld 2005). Working closely with another organisation is such a situation can require a change in managerial thinking and practices (Whipple & Frankel 2000). The structures, strategy and systems of the organisations involved interact and require unique thinking to accentuate knowledge creation, transfer and creativity (Spekman et al. 1998). Senior managers may draw on past experiences, education and the organisation's intentions to guide strategic decision making in unfamiliar situations, being boundedly rational players (Esteve et al. 2013; Levinthal & March 1993). They enact communication, act as exchange agents through their interpretation of information and mitigate tensions arising from ambidexterity in collaboration (Isbell 2012).

In addition the benefits of collaboration can be slow to emerge, so managers need to generate momentum to overcome any resistance and implement enablers. Fawcett, Magnan and Fawcett (2010) indicate 'Many companies simply do not have the vision or the patience to learn how to collaborate successfully'. Managers' perception of the enabling value of a collaboration practice is influenced by their daily experience of it (Fawcett, Magnan & Fawcett 2010). Fawcett, Magnan and Fawcett (2010) conducted

a longitudinal study to investigate managers' views on supply chain collaboration. They found that indirect experience of collaboration enabling practices, such as through others reporting them in newsletters and meetings, resulted in a lower ranking of importance than if the manager had more direct experience of it. Fawcett, Magnan and Fawcett (2010) suggest that such fragmentation of experience increases silo thinking in an organisation. To counteract this, they recommend that training, team work, staff rotation programs and greater communication of success stories are undertaken within an organisation.

Besides accessing information from the business ecosystem to inform strategic decision making and adaptive sense making, both knowing what information to seek and interpreting the information received are crucial (Johnston, Gilmore & Carson 2008; Wang & Chan 1995). These are a function of the worldviews, or mental models, of the senior managers (Johnston, Gilmore & Carson 2008; Klimoski & Mohammed 1994). The mental models of senior managers will determine how they see and make sense of the uncertainty and how they act (Daft & Weick 1984; Senge 1990). Mental models can be influenced by experience, age, managerial level, values and beliefs in addition to strategic focus (Ireland et al. 1987) and are not static (Johnston, Gilmore & Carson 2008). As new information is received, interpreted and assimilated the mental model may be altered in the process of sense making (Johnston, Gilmore & Carson 2008; Weick, Sutcliffe & Obstfeld 2005). Mental models are applied to environmental uncertainty for example, by choosing which key influences are going to be monitored, which trends will be sensed and how they will be interpreted to give meaning and produce new data (Daft & Weick 1984; Johnston, Gilmore & Carson 2008; Weick, Sutcliffe & Obstfeld 2005). Central to this knowing

of the environment are the individual perceptions of senior managers, framed by their mental models. Importantly how they apply their mental models will affect achievement of strategic intent in collaborative ventures and sustainable competitive advantage as the organisation adapts and reconfigures.

2.6.7 Ambidexterity and knowledge creation

From the foregoing discussions, it is evident that achieving balance and managing trade-offs across various strategic aims may lay the foundations for enhanced performance and prevent failure (Probst & Raisch 2005; Rothaermel & Alexandre 2009). Further an ambidextrous senior management team may be a key discriminator in why some firms thrive in dynamic environments (Lubatkin et al. 2006; O'Reilly & Tushman 2007). Ambidexterity is a complex concept which is both difficult to observe (Rothaermel & Alexandre 2009) and not yet conceptually clear, resulting in a range of different measures that cannot then be compared across studies (Cao, Gedajlovic & Zhang 2009), such as He and Wong (2004) and Lubatkin et al. (2006). There are areas that are more vigorously researched than others, for instance links to performance and antecedents (Gibson & Birkinshaw 2004; He & Wong 2004; Jansen, van den Bosch & Volberda 2005). Moreover research into the how of managing organisational ambidexterity is sadly lacking (Adler, Goldoftas & Levine 1999; Nasim & Sushil 2011; O'Reilly & Tushman 2011; Raisch & Birkinshaw 2008; Siggelkow & Levinthal 2003). Raisch and Birkinshaw (2008) additionally suggest there is a lack of empirical research and frameworks that may assist managers (By 2005; Napier, Mathiassen & Robey 2011; Nasim & Sushil 2011). Considering exploration as exploitation in the future on an as yet unknown performance standard may also enable cognitive shifts in senior management teams, making exploration

less likely to be pursued because of bounded rationality (Simon 1982). Managers have limited computational abilities to cope with the complexity of change, tending to preserve stability, taking an easier option or because it is a proven approach that works, ignoring the opportunity cost of innovation and future success (Adner & Levinthal 2008; Millett 2006).

Combining different organisational elements is little researched, either conceptually or empirically (Cao, Gedajlovic & Zhang 2009; Napier, Mathiassen & Robey 2011; Raisch & Birkinshaw 2008; Rivkin & Siggelkow 2003). Interaction effects between formal and informal mechanisms have been found empirically to be positively linked with managerial ambidexterity by Mom, van den Bosch & Volberda (Mom, van den Bosch & Volberda 2009). By simultaneously providing a formal hierarchical structure and encouraging horizontal relationships managers' ambidexterity is enhanced and fostered. Moreover they find that in terms of direct effects the personal coordination mechanisms are more effective than the formal mechanisms, similar to recent research on the value of more informal types of coordination on knowledge and learning processes (Argote, McEvily & Reagans 2003; Faraj & Xiao 2006). One identified gap is the need for further research into different antecedents and their interaction and complementarity in the field of ambidexterity (Raisch & Birkinshaw 2008). Drawing on O'Reilly and Tushman (2007), Raisch and Birkinshaw (2008, p. 399) suggest that key antecedents include 'a strategic intent, overarching vision and values, and an aligned senior team with the ability to manage trade-offs'. O'Reilly and Tushman (2011) studied case studies of 15 firms that were attempting to manage both exploration and exploitation. They find clear support for the significance of the capabilities of the senior management team in terms of articulating a strategic intent

and organisational vision and managing resource allocation effectively amongst competing demands; the latter reinforcing similar findings by Lubatkin, Simsek, Ling and Veiga (2006). O'Reilly and Tushman (2011) highlight that it is the set of components interacting together that matters, similar to research that has found senior managers' inability to effectively allocate scarce resources integral to firm failure (Gilbert 2005; Tripsas & Gavetti 2000). Strategic intent, organisational vision and how the senior management align these to generate a creative tension that does not become rigid, are the key features of effectively managing ambidexterity. The research in this thesis is exploring the role of strategic intent in senior managers' practices in relation to collaborative ventures.

Despite the links with dynamic capabilities there is surprisingly little mention of the central role of knowledge creation, transfer and learning processes in the ambidexterity literature, apart from the recognition of the value of prior related knowledge for an individual to be able to assimilate and use new knowledge (Cohen & Levinthal 1990). Yet both exploration and exploitation require knowledge creation, knowledge transfer, absorptive capacity and learning processes within the organisation to build from (exploit) and grow (explore) the organisation's knowledge base for sustainability through ambidexterity (Lavie & Rosenkopf 2006; Levinthal & March 1993; March 1991). March (1991, p. 85) states that the 'essence of exploration is experimentation with new alternatives' and the 'essence of exploitation is the refinement and extension of existing competences'. Moreover Boal (2000) indicates that having a higher learning capacity in an organisation is likely to create a deeper understanding of vision, fostering greater alignment and focus throughout the organisation. Knowledge creation and learning processes

however appear to be somewhat overlooked in the more recent literature on organisational ambidexterity, despite Abernathy's (1978) study of the car industry indicating that an organisation's ability to create new learning curves and move along existing ones may lead to long-term sustainability. By studying knowledge creation and transfer in collaborative venture, this thesis may contribute further to this discussion.

From the above discussion it can be seen that strategic intent, organisational vision, coordinating mechanisms and absorptive capacity are important to ambidexterity. Yet research appears to be limited as yet connecting these key areas. Given the recency of the burgeoning interest in ambidexterity (Raisch et al. 2009), research may perhaps yet be too exploratory to be of value to practising managers who wish to effect and manage ambidexterity meaningfully. The next chapter further investigates collaboration. Knowledge creation, transfer and absorptive capacity are covered in more detail in the subsequent chapter.

2.7   Summary

Increasing growth in the literature on organisational ambidexterity over recent years has raised many questions, as yet unanswered. Ambidexterity is acknowledged as being vital to an organisation's ability to be competitive into the future by enabling both exploration and exploitation. Having the adaptability within an organisation to manage both change and continuity is a complex capability that may be assisted by alignment and coordinating mechanisms.

Alignment facilitates the matching of internal capabilities and external opportunities, enabling implementation of strategy by creating fit. However this risks creating rigidities which can be counterproductive. Being flexible and adaptable when configuring an organisation may reduce the risk by reconciling the tension through internal abilities, enabling a resolution. Scholars have suggested that having a strategic intent and an organisational vision may assist, effectively acting as coordinating mechanisms.

Coordinating mechanisms are implemented by senior managers to achieve organisational outcomes and may be formal or informal. There are mixed academic views on the value of coordinating mechanisms, suggesting a need for further research into their role. Of interest to this study is the role of an informal mechanism, organisational vision, which is determined by an organisation's strategic intent, which can therefore be considered an indicator of that intent. Individual senior managers therefore face many complex tasks as they not only contribute to the creation of the strategic intent but also manage the integrating mechanisms responsible for its implementation. Their commitment to ambidexterity and the ways they frame artefacts such as an organisation vision are key elements in being able to effectively manage ambidexterity.

A collaborative venture provides a context in which ambidexterity may be necessary. Within a collaborative venture one of the key benefits that arise is the potential for innovation from knowledge creation due to the interactions that occur. In the process of developing the collaboration, as well as when it is established, there is the potential for knowledge creation and transfer due to the social interactions that are

occurring. Yet there is also the risk that having a strategic intent for the collaboration that does not include innovation may curtail recognition of the knowledge creation and transfer opportunities. Many collaborative ventures are deemed failures and it may be that knowledge gained from a collaborative venture is placed in the paradoxical place between exploration and exploitation. The subsequent chapter looks more closely at collaborative ventures.

Chapter 3 Collaboration and strategic benefits

3.1 Introduction

The increasing dynamism and turbulence in the global business environment affect the way managers are approaching the strategic management of organisations (Holmberg & Cummings 2009; Miles & Snow 1978; Pavlovich 2003). Organisations are seeking ways to both protect existing competitive advantage and explore new opportunities to secure sources of competitive advantage, optimise growth and create resilience for long-term sustainability with change being a constant (Ben-Menahem et al. 2013; Fawcett et al. 2009; Hitt, Keats & DeMarie 1998; Spekman et al. 1998). Coopetition and collaboration in trading networks to enable cost savings to access joint learning from emerging opportunities are increasing (Desai 2010; Ketchen, Hult & Slater 2007; Song 2003). Collaborations with other organisations facilitate connections across organisation boundaries. There is thus increasing interdependence between organisations as they connect beyond their own boundaries for sustainable competitive advantage.

To create an understanding of the key strategic drivers to form collaborative ventures, this chapter first investigates collaboration, including the varied arrangements it can take and the dynamics in play. The strategic drivers themselves and the effects of collaboration are then explored.

3.2 What is collaboration?

In recent decades collaboration has been embraced as a new paradigm, with many authors advocating its use for example to increase profits or to gain market access (Contractor & Lorange 1988; Cruijssen, Dullaert & Fleuren 2007; Nooteboom 2004;

Todeva & Knoke 2005). However collaborative ventures themselves are not a new phenomenon, with Ancient Greek city states cooperating to defeat the Persian Empire by working together (Smith, Carroll & Ashford 1995). At the start of the 20th century, the eminent thinker Mary Parker Follett studied creative integration, the process underlying collaboration, indicating that integration involves novelty and innovation (Fox & Urwick 1973). Mintzberg, Dougherty, Jorgenson and Westley (1996) importantly note that she explains the value of collaboration to organisations, allowing the invention of new ways of doing business through integration and synthesis. Such thinking was echoed by Wall and Koprowski, founders of Centocor, who saw collaboration as pivotal to their business model, accessing new ideas in biotechnology via networking in the early 1980s (Marks 2009). Thus although collaboration is not new in the world of business, nowadays collaborative ventures and the collaboration paradigm are increasingly being advocated to facilitate connections across organisation boundaries.

3.2.1 Collaboration defined

The increasing proliferation of collaborative ventures over recent decades has generated great interest amongst academics and practitioners alike from multiple disciplines and fields resulting in a rich literature to better understand collaborative ventures, such as Ohmae (1989) and Contractor and Lorange (1988) (international business); and Min (2005) and Soosay (2008) (supply chain management). The range and diversity of disciplines interested in collaboration results in few holistic, agreed views on many fundamentals of the collaboration phenomenon.

Collaboration and its roles are not given a straightforward interpretation in the academic and practitioner literature. Many researchers and practitioners from diverse disciplinary backgrounds, such as sociology, psychology and game theory have a specific theoretical perspective and interpretation (Phillips, Lawrence & Hardy 2000; Powell & Swart 2005; Thomson, Perry & Miller 2007; Zineldin & Bredenlöw 2003). Even within one body of literature such as management, whether academic or practitioner, the interest in collaboration is from diverse angles, creating further nuances in the terminology. The international business literature, for example Contractor and Lorange (1988), tends to define its interest in terms of the forms of collaboration. Whereas in literature pertaining to supply chain management the focus is more on relationships or technology (Barratt 2004a; Hagel, Durschslag & Brown 2002). With such keen and diverse interests a rich collection of terminology has resulted (Cruijssen, Dullaert & Fleuren 2007).

However, as Hagel, Durschlag and Seely Brown (2002, p. 1) comment, '"collaboration" is either discussed too broadly or too narrowly to be actionable' and the '"collaborative enterprise" lives in theory but is seldom seen in practice'. Salk (2005, p. 118) notes there is a lack of 'collective introspection and constructive dialog in the field, and especially with subgroups that have minimal intellectual traffic with one another', which echoes Park's (2001) view. Building a sound foundation for a body of academic research is difficult when there are few attempts to connect the diverse literatures and terminologies (Smith, Carroll & Ashford 1995, p. 10). The opportunity for clarity in the terminology is further reduced.

The key distinguishing feature of interest is that there is a degree of interdependence in any joint activities in which the venture is engaged, which are entered into for mutual benefit and are instigated to achieve specific purposes (Child, Faulkner & Tallman 2005; Draulans, deMan & Volberda 2003; Thomson & Perry 2006). Spekman (1998, p. 762) indicates that an 'alliance is a dynamic interaction of business and interpersonal activities whose purpose is to achieve mutually beneficial goals'. Recognising the inherent complexity of the phenomenon (Fawcett, Magnan & Fawcett 2010; Phillips, Lawrence & Hardy 2000), definitions can be found that focus only on key aspects such as relationships, outcomes and processes. For instance Sandow (2005, p. 9) indicates that 'collaboration is the social coordination of action, and occurs in a social system of relations wherein everyone in the network is accepted by everyone else in the network as a contributor toward a shared purpose'. In contrast Kanter (1994, p. 105), in her seminal article focuses more on the outcomes of the integrative value of collaboration through partnerships, including 'mechanisms, such as structures, processes, and skills – for bridging organizations and interpersonal differences', echoing Emery and Trist's (1965) view of connectivity in business ecosystems.

Such connectivity contributes to the processes and dynamism involved. Gray (1989, p.15) insightfully comments that collaboration is creative being 'essentially an emergent process rather than a prescribed state of organization'. The dynamism inherent in Gray's (1989) notion of collaboration being an emergent process is critical to knowledge creation and can often be missing from definitions. Hagel, Durschslag and Brown (2002, p. 19) observe 'collaboration is itself a journey', yet it is frequently discussed as a static entity, with little consideration of its inherent

dynamism, complexity or processes (Hardy, Lawrence & Grant 2005; Kampstra, Ashayeri & Gattorna 2006; Mintzberg et al. 1996; Nooteboom 2004; Stank, Keller & Daugherty 2001). With such inherent complexity, no widely-accepted definition of collaboration and its associated terminology, comparing across studies is difficult (Thomson, Perry & Miller 2007).

In this complex domain, advice is taken from Hardy, Phillips and Lawrence (2003, p. 323) to clarify the definition adopted for this thesis. They suggest that a definition needs to be 'inclusive enough to encompass a wide range of collaborative arrangements (e.g. consortium, alliances, joint ventures, roundtables, networks, associations) and yet provides a set of critical characteristics that distinguishes it from other interorganizational activity'. Moreover Thomson, Perry and Miller (2007) suggest for a definition to have value in practice it needs to be distinctive and complete, with further value added if it is grounded in empirical evidence. Following field research, Thomson, Perry and Miller (2007), with a strong influence from Wood and Gray's (1991) definition based on a synthesis of studies, developed a definition that is used in this thesis.

> Collaboration is a process in which autonomous or semi-autonomous actors interact through formal and informal negotiation, jointly creating rules and structures governing their relationships and ways to act or decide on the issues that brought them together; it is a process involving shared norms and mutually beneficial interactions (Thomson, Perry & Miller 2007, p. 25).

Defining collaboration in this manner for this thesis enables its inherent dynamism to 'collectively cope with the growing complexity of their environments' (Gray 1989, p. 236) and its mix of process and relationships to be highlighted. The interactive nature

of the phenomenon is evident in this definition. The role of the parties involved in determining how the collaboration will function and evolve is clear. Collaboration has a mutual goal, which makes it a more committed arrangement than cooperation, which involves exchange of resources and reciprocities. The mutual benefits that are the outcomes of collaboration and the drivers to form them are emphasised by the definition. Being founded on joint goals and decision making, a collaborative venture creates a negotiated ordering of the environment. Both the mutuality of the process and the positive benefits are clear from this definition. As Gray (1989, p. 5) indicates, collaboration enables different parties to 'explore their differences and search for solutions', creating 'a richer, more comprehensive appreciation of the problem among the stakeholders than any one of them could construct alone'. What this definition also highlights is that there are underpinning strategic drivers which bring organisations together. Prior to investigating these strategic drivers, which demonstrate strategic intent, it is appropriate to better understand the forms of collaborative arrangements that are available for organisations. These are introduced in more detail in the next section.

3.3   Forms of collaborative arrangements

Historically collaborative ventures are agreements between organisations to achieve at least one common strategic objective, formed with the intention of creating value by coordinating activities (Cravens 1997; Draulans, deMan & Volberda 2003) and are based on close inter-firm relationships; they are considered a strategic asset (Doyle 1995; Johnson 1999). There is widespread acknowledgement in the literature that such agreements are a unique arrangement that are neither market nor hierarchy

but entities that contain a degree of interdependence (Child, Faulkner & Tallman 2005; Thorelli 1986). There are myriad diverse collaborative arrangements that can be adopted by these entities such as a strategic alliance or, more recently, as a collaboration-enabled supply chain (Child, Faulkner & Tallman 2005; Fawcett, Magnan & Fawcett 2010). The following discussion begins with the more conventional collaboration arrangements.

3.3.1 Conventional collaboration arrangements

The lack of universal agreement among scholars and practitioners creates a wide variety of synonyms for the traditional arrangements collaboration can take. For example, the term collaborative venture itself is but one among many imbued with similar meaning, including interorganizational relationships (Nooteboom 2004; Oliver 1990; Ring & van de Ven 1994), strategic networks (Jarillo 1988) and dynamic networks (Miles & Snow 1986). Moreover terms are often used interchangeably, such as strategic alliances, joint ventures, inter-firm linkage and horizontal cooperation (Chen, Mattioda & Daugherty 2007; Clarke-Hill, Li & Davies 2003; Cruijssen, Dullaert & Fleuren 2007; Hansen & Nohria 2004; Nooteboom 2004; Todeva & Knoke 2005; Zineldin & Bredenlöw 2003). A fuller discussion of the various arrangements possible can be found in Nooteboom (2004), Todeva (2005) or Soosay, Hyland and Ferrer (2008). To help rationalise and understand the different arrangements, many classification schemes have been developed.

One of several approaches utilised to rationalise this diversity of terms is classifying the various types of collaborative venture by their legal form, for example whether they are joint ventures or franchises (Nooteboom 2004). For example Ghemawat,

Porter and Rawlinson (1986) study the flows of collaborative ventures, termed coalitions, over 1970-1982. They classify them for comparison in ways including their contractual form, geographic distribution, sector, industry group and coalition purpose. Cravens (1996) takes a different approach, combining environmental volatility with the degree of collaboration to form a matrix as the taxonomy. Other common approaches include the collaborative venture's position in the value chain, for instance horizontal alliances (Cruijssen, Dullaert & Fleuren 2007), their functional form, such as marketing alliances (Child, Faulkner & Tallman 2005; Joia & Malheiros 2009) or governance (Nooteboom 2004; Soosay, Hyland & Ferrer 2008; Todeva & Knoke 2005). Xie and Johnston (2004) identified twenty-nine different forms of alliances. They suggest that given the breadth and heterogeneity of definitions of alliances encountered in the literature and practice, current classifications are of little assistance for analysis and decision making. Few of these arrangements have 'successfully met the accepted taxonomic principles of mutual exclusivity and parsimony' (Child, Faulkner & Tallman 2005, p.108). With so many different classifications, when choosing the sample population the type of collaborative arrangement was not a selection criterion. Further given the diversity of potential collaborative arrangements, this thesis will use the term collaborative venture henceforth to represent them, unless discussing a particular type of collaborative arrangement that was the focus of an empirical study.

An alternative approach to classification is considering the relationship intensity of the collaborative venture. Kanter (1994, p. 98) suggests that collaborative ventures range in 'a continuum from weak and distant to strong and close'. At the weaker end of the continuum are arrangements such as roundtables or associations, whereas

stronger links occur with more formal contractual arrangements (Todeva & Knoke 2005). Similarly Lambert, Emmelhainz and Gardner (1999) discuss three levels of partnership, with Type 1 having a short-term focus, primarily based on coordination. Type 3 partnerships comprise significant levels of integration with a long-term perspective; partners consider each other as extensions of their own organisation. The Type 2 level falls in between these degrees of integration and time-frames. Greater levels of integration and strategic importance require more senior management time and greater resource commitments. The graduated nature of the strategic commitment is shown in a continuum. (Fawcett, Ellram & Ogden 2007). Figure 3.1 below indicates that the levels of senior management time and resource commitment increases from low in transactional relationships to more intense in long-term strategic relationships in a continuum. The involvement of the senior managers in the collaborations demonstrates the strategic significance of the collaborative ventures.

Figure 3.1   Relationship intensity continuum

Transactional   **Strategic**

⟵————————————————————————————————————⟶

Low   Senior management time and resource commitment   **High**
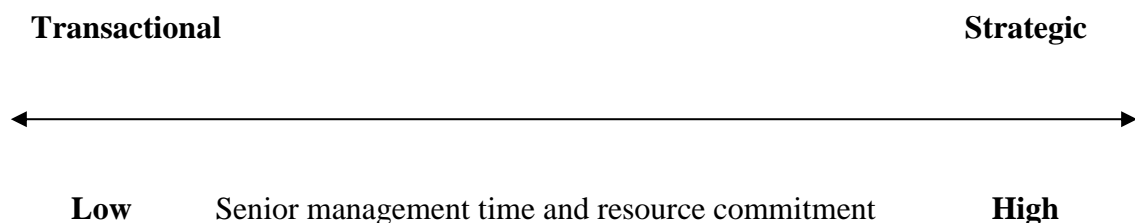
Source: Adapted from Fawcett, Ellram and Ogden (2007, p. 347).

At the low end of the continuum are transactional relationships which are more arms' length and often transitory. Besides the basic transactional elements involved, such as purchasing and delivering the goods, there is little additional benefit or cost to the organisations involved. However at the high end of the continuum the relationship is more intense, requiring greater inputs. These inputs may involve sharing information or pooling resources. Consequently a higher level of commitment occurs, including senior manager involvement and shared risks and rewards (Fawcett, Ellram & Ogden 2007). This relationship focus highlights the collaboration enablers, such as sharing, communication and commitment necessary to a collaborative venture and its ongoing maintenance. Additionally it draws attention to the inherent dynamism that is occurring through the negotiated ordering of mutual benefits, open communication, sharing the risks and rewards and the importance of senior manager's involvement. The definition that is being used in this study, with a focus on mutually beneficial interactions and joint decision making, encompasses the many diverse arrangements, including a more recent development, that of a collaboration-enabled supply chain. The collaboration-enabled supply chain is discussed next.

3.3.2 Collaboration-enabled supply chains

More recently collaboration has been given a central role in the context of supply chain management, where it is necessary to generate efficiencies and effectiveness (Barratt 2004a; Fawcett, Magnan & Fawcett 2010; Gattorna 2006; Lambert, Emmelhainz & Gardner 1999; Mentzer, Stank & Esper 2008). Within this discipline, collaboration occurs primarily as a result of competitive dynamics. Such dynamics encourage organisations to utilise resources and competences of other organisations that together create customer value (Barney 1991; Dierickx & Cool 1989; Eisenhardt

& Martin 2000; Harrison et al. 2001; Mahoney & Pandian 1992). By bringing complementary resources together a collaboration-enabled supply chain may provide competitive advantage (Fawcett, Magnan & Fawcett 2010; Fawcett, Magnan & McCarter 2008a; Gattorna 2006; Helfat & Peteraf 2003; Holcomb, Holmes & Hitt 2006; Lambert, Emmelhainz & Gardner 1999). Working together in this way, organisations can develop relational capabilities that create above average economic rents and improved organisation performance (Dyer & Singh 1998; Harrison et al. 2001).

The growth in collaboration-enabled supply chains has arisen from increasing recognition that a large percentage of an organisation's non-imitable capabilities are sourced from outside its boundaries. Monczka, Handfield, Giunipero and Patterson (2011) indicate that between 50-80 per cent of cost of goods sold are sourced externally. Being able to combine and structure resources in novel ways that are difficult to replicate can create competitive advantage (Barney 1991; Barney 2001; Eisenhardt & Martin 2000; Teece, Pisano & Shuen 1997). The relational view of the firm supports this view, by arguing that inter-firm resources and routines can be sources of advantage (Dyer & Singh 1998), with more valuable and rare resources yielding greater advantage (Barney 1991; Dierickx & Cool 1989). By integrating complementary competencies with routines, organisational performance may be improved by both reducing costs and improving customer satisfaction (Ellinger, Keller & Hansen 2006; Fawcett, Magnan & McCarter 2008b; Feldman & Pentland 2003; Fine 1998; Pentland & Feldman 2008). According to more recent Resource Based View (RBV) research, how resources are configured provides the critical distinctive performance (Barney 2001; Eisenhardt & Martin 2000; Newbert 2007;

Teece, Pisano & Shuen 1997). Extended enterprises provide opportunities for competitive advantage by accessing and melding resources and routines across the supply chain to improve performance (Dyer & Singh 1998; Mahoney & Pandian 1992; Mentzer, Stank & Esper 2008; Moberg, Speh & Freese 2003). Examples can be seen in the success of companies such as Wal-Mart, Dell and Cisco Systems (Moberg, Speh & Freese 2003). Empirical research confirms these positive outcomes of collaboration in supply chains, particularly by improving productivity, customer satisfaction and customer service (Fawcett, Magnan & Fawcett 2010; Hendricks & Singhal 2005; Hult, Ketchen & Slater 2004; Lee 2004).

Collaborations thus provide an opportunity to both access external capabilities and develop routines that can further enhance competitive advantage, making a collaboration-enabled supply chain a powerful strategic tool for organisation sustainability. Such linked entities incorporate strategic opportunities for both exploitation and exploration. Collaboration is a valuable dynamic capability (Helfat & Peteraf 2003; Teece, Pisano & Shuen 1997) such that more agile companies can then reap the advantage. Yet Fawcett, Fawcett, Watson and Magnan (2012, p. 45) indicate that 'the dynamism and intricacies that delimit the processes' are frequently not grasped 'by managers and researchers alike'. The delimiting factors that affect collaboration, the key decisions related to its formation and the process that is collaboration are the same regardless of the arrangement it takes, apart from any legal and contractual differences established as part of its governance. Collaboration-enabled supply chains can perhaps be informed by the findings from other literature. Before the strategic opportunities are discussed further, the next section explores the key success factors.

3.4   Key success factors

Within the context of an organisation there are collaboration inhibitors and enablers that may influence both decisions to form collaborative ventures and the outcomes of such ventures once commenced (Barratt 2004b; Fawcett, Magnan & McCarter 2008a; Greve et al. 2010; Hansen & Nohria 2004; Spekman et al. 1998). Greer and Ford (2009) and Fawcett, Magnan and Fawcett (2010) suggest there is a force field (Lewin 1952) operating, such that the end result depends on their relative power, in conjunction with that of the external influences. If the internal inhibitors are greater, the resistance can be terminal (Lee 2004), with the organisation becoming frozen, locked in non-collaborative behaviour (Fawcett, Magnan & Fawcett 2010; Greer & Ford 2009). Within an organisation there are resisting forces, usually behavioural constraints which may occur in people, policies or processes, limiting the forces pushing towards collaborative ventures (Dent & Goldberg 1999; Fawcett et al. 2012; Kotter 1995). Behavioural constraints may include conflict, both between the two or more collaborating organisations or internal departments (Barratt 2004a; Moberg, Speh & Freese 2003), unwillingness or inability to help (Hansen & Nohria 2004), lack of trust and lack of communication. Additionally established norms, routines and procedures may restrict adaptation according to structural-inertia theory, particularly when long-held or well-established (Barron, West & Hannan 1994; Hannan & Freeman 1984).

3.4.1   Collaboration dynamics

Adding further difficulty in establishing the key success factors is the inherent dynamism of the black box of collaboration. There are many different factors at play

that may either delimit or enhance these processes in collaborative ventures. Such factors may affect the process during formation, implementation, ongoing management and cessation. These factors are interdependent and together create the process of doing, the black box that is collaboration (Fawcett et al. 2012; Thomson & Perry 2006; Wood & Gray 1991). Separating these interdependent factors into a logical order is thus difficult. Spekman (1998) observes that alliances are usually studied at one point in time, usually in their formation. There is often an underlying assumption that they are static entities whereas in reality they comprise a 'dynamic interplay of activities, people and process' (Spekman et al. 1998, p. 762) which is little understood (Wood & Gray 1991). Over time organisations interact as they negotiate, develop commitments to the collaboration and its relationships and implement those commitments (Gray 1989; Ring & van de Ven 1994; Thomson & Perry 2006); it is a process (Mintzberg et al. 1996). Ostrom (1998) for instance argues that people in collaborations are likely to implement trial and error processes to ensure the achievement of net benefits by innovating and changing structures. Utilising a process framework perspective on collaboration is supported by findings from game theory (Axelrod 1984, 1997; Ostrom 1990, 1998). Thomson and Perry (2006, p. 22) adapt Ring and Van de Ven's (1994) process framework as it is 'iterative and cyclical rather than linear' to show the inherent dynamism from the emergent nature of collaboration. Figure 3.2 shows the processes at work in a collaborative venture. The collaborative venture can be likened to a black box, with these processes operating within (Fawcett et al. 2012).

Figure 3.2   A process framework of the collaboration black box
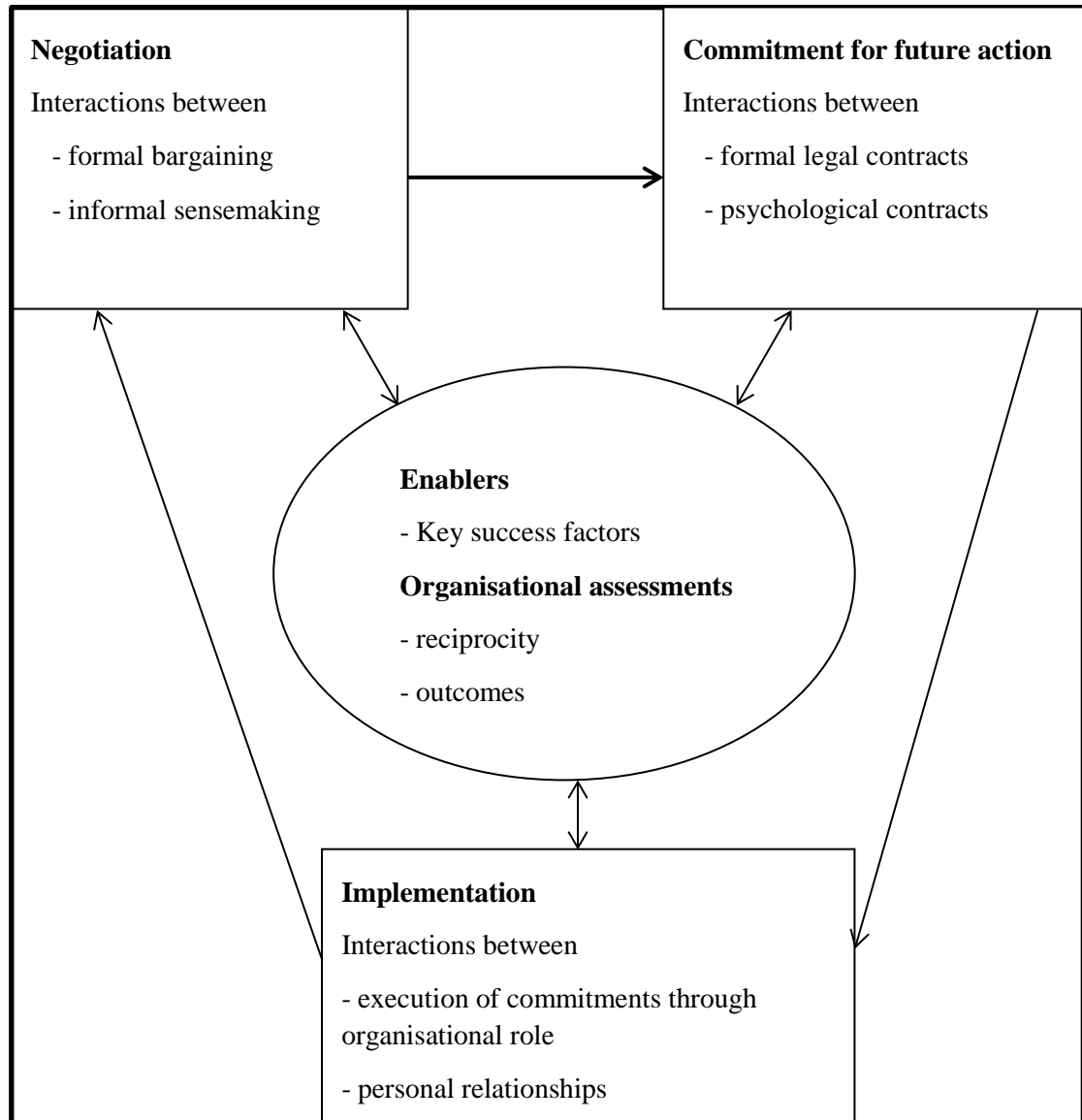
Source: Adapted from Thomson and Perry (2006, p. 22).

The above black box framework shows that as collaborations evolve there are integrative elements found in implementation, negotiation and commitment. Informal and relational aspects such as psychological contracts that 'supplant the aggregative elements manifest in formal organizational roles and legal contracts' come into play

(Thomson & Perry 2006, p. 22). In Thomson and Perry's (2006) conceptualisation, they separate the antecedents, the process and the outcomes, as shown in Figure 3.3 below. The interactivity is acknowledged by a link from the collaboration's outcomes back to the antecedents, but not directly back into the process itself.

Figure 3.3   Interactions in a collaborative venture
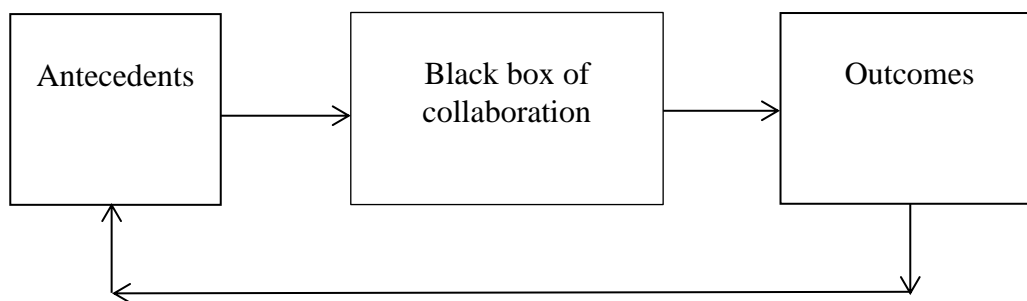
Source: Adapted from Thomson and Perry (2006, p. 21)

Over time the interactions between the process and its elements are thus evolving adding further complexities to studying the dimensions of the black box. Such evolution makes it difficult to ascertain implications for both theory development and practice. An additional complication is that with diverse literature, industries and nationalities interested in key success factors of collaborations, different terminologies are applied in empirical studies making comparisons between study outcomes more difficult. However it is apparent that people and their relationships are central to the business processes of collaboration.

In addition, senior management involvement is necessary to negotiate the order in the collaborative space, enabling the advantages of collaboration to emerge and be

accessed. For senior managers it would be helpful to be cognisant of the key success factors for collaboration that will assist emergence through these processes in practice. However authors who have empirically studied these factors such as Barratt (2004b), Whipple and Frankel (2000) and Sandberg (2007) arrive at diverse conclusions and recommendations, indicating that the key success factors are not yet fully identified and developed. Defining success may be part of the lack of consensus. Key success factors relate to relationships and senior management support.

3.4.2 Interpersonal and business relationships

Collaboration involves interpersonal relationships formed with other organisations. Organisations connect to other organisations and institutions through relationships (Phillips, Lawrence & Hardy 2000; Ritter, Wilkinson & Johnston 2004). In collaborative ventures the relationships formed are the lynchpin. Gummesson (1996, p.33) considers relationships consist of 'contact between two or more people, but they also exist between people and objects, symbols and organizations'. Relationships can be both interpersonal and professional. The quality of these types of relationships, which are mutually supportive, needs to be considered for success (Child, Faulkner & Tallman 2005; Shaughnessy 1995; Spekman et al. 1998). Relationship quality has both an economic and a social aspect (Huntley 2006). Social exchange theory (Blau 1964) for example indicates that the intrinsic utility beyond the economics of the relationship has to be taken into account (Spekman et al. 1998). Barringer and Harrison (2000, p. 396) in their review of six theoretical paradigms utilised to explain the formation of interorganisational relationships and their

advantages conclude that there is little research on 'how interorganizational relationships are managed'.

Relationships and their interactions facilitate exchange and have been studied extensively in diverse literature, including marketing in which there is growing support for this central role of relationships (Arnett, German & Hunt 2003; Morgan & Hunt 1994) by eminent scholars such as Grönroos (2000) and Gummesson (1996; 2009). Keast and Hampson (2007) explore relationship management in a case study of a collaborative, inter-organisational innovation network based on the Cooperative Research Centre for Construction Innovation. They find that relationship management and associated governance structures adapt over time, depending on the requirements of the stage of the relationship, consistent with earlier findings (Lowndes & Skelcher 1998; Sydow 2004). Further, they emphasise the importance of strategic management of the relationships for effective outcomes, with activating, framing, mobilising and synthesising key ways of managing (Agranoff & McGuire 2001; Kickert, Klijin & Koppenjan 1997).

Human aspects of relationship are central to the black box of collaboration. These aspects of relationships in collaborative ventures, such as mutual dependence, trust, commitment, norms and communication, are widely discussed in diverse literatures. For example Spekman (1998) and Larson (1992) suggest social dimensions that enable collaboration include trust, reputation, reciprocity and mutual interdependence highlighting the criticality of human interactions to collaboration (Dahlander & McFarland 2013; Mintzberg et al. 1996). For the activities embedded in collaboration, there is an 'importance of undertaking the actions with the "right"

intentions, referring to trust, win-win thinking, common goals etc' (Sandberg 2007, p. 281). Communication, foundational to the human interactions, is improved with face-to-face meetings and conversations, as non-verbals can be more readily understood and exchanged (Mintzberg et al. 1996). Compromise and influence are also considered critical to achieve mutual goals and their requisite processes and procedures (Spekman et al. 1998).

3.4.3 Inhibitors and enablers of success

Thomson and Perry (2006) in their conceptualisation of the collaboration black box consider that it comprises five dimensions, being governance, administration, organisational autonomy, mutuality, norms of trust and reciprocity. The interactions between these five dimensions will affect the success or failure of a collaborative venture. To assist senior managers with the black box processes, there are some approaches that have been adopted to better understand the inhibitors and enablers of success.

Barratt (2004b) investigated the inhibitors and enablers of collaboration, with a case study in the UK grocery sector. Strategic inhibitors, mechanistic relationship behaviours, differing trading strategies, organisational size, mutual benefit identification and understanding the role of information are identified and compared with the enablers. He found that the inhibitors of collaboration were not mirrored directly by the enablers. Key strategic enablers were dialogue at board level, an information-based culture, mutual interdependency, communication and information sharing and openness. He also found that neither common goals and objectives nor behavioural enablers, such as lack of trust and lack of honesty, were found at the

strategic level, occurring at the tactical and operational levels (Barratt 2004b). This contrasts with Browning, Beyer and Shetler's (1995) findings suggest that leaders play an important role in creating a trusting environment, such as occurred at SEMATECH, an R&D consortium, following its tense beginnings that included conflict and ambiguity. The details of the respondents' roles in Barratt's (2004b) case study are not included, giving limited indication of their seniority.

Sandberg (2005, 2007) who studied collaboration across diverse manufacturing industries, found that the strategic dimension is missing when considering the inhibitors and enablers. He classified barriers to collaboration as technological and soft activities, the latter being related to human beings. Soft activities detailed are 'trust, organizational compatibility, commitment, vision, key processes etc.' (2007, p. 281). Whipple and Frankel (2000) investigated alliance practice in two industries, food and health and personal care in USA, with a high level of alliance activities related to efficient consumer response between manufacturers and retailer. Studying the dyadic relationships between suppliers and buyers, the top five success factors were determined. Both groups included the same five factors, namely trust, senior management support, ability to meet performance expectations, clear goals and partner compatibility. However the ranking of these factors varied between suppliers and buyers.

Fawcett et al. (2012) similarly found trust the most important enabler of collaboration, with better information availability and aligned goals and measures the next ranked factors. In these findings from a multi-case study, the inhibitors mirrored the enablers in the top ranked factors. They advocate putting structural enablers into

place to overcome resistance. Additionally building on success with leadership activities such as communicating success and continual learning about relationship management will improve the functioning of the enablers. However there appears to be a persistent tension between the advantages that come with collaboration-enabled supply chains, which combine complementary competences, and the disadvantages of building relationships (Fawcett et al. 2012). The role of leaders, soft relationship skills and clear goals are important enablers of successful collaboration. The role of inhibitors and enablers may reflect the ambiguity of representations of knowledge in the literature on collaboration (Todeva & Knoke 2005). There appears to be opportunities for further clarification of the enablers to assist senior managers in practice achieve successful collaboration outcomes. The dimensions of the black box and enablers of successful collaboration are indeterminate and complex. Better understanding of how practicing senior managers address these issues in depth may be helpful for successful collaborative ventures.

3.5   Strategic drivers to form collaborative ventures

Many positive strategic outcomes are possible when collaborating with other organisations, including the potential for knowledge creation, cost savings and improved customer service (Helfat & Peteraf 2003; Teece, Pisano & Shuen 1997). Other less tangible potential gains include better decision making, innovation and enhanced capacity for collective action (Hansen & Nohria 2004; Kampstra, Ashayeri & Gattorna 2006; Powell, Koput & Smith-Doerr 1996). Such gains may arise through interaction effects (Walters, Bjattacharjya & Chapman 2011). However

despite these positive potential outcomes, collaborative ventures are generally deemed to be unsuccessful.

3.5.1 Failure of collaborative ventures

Despite this potential for gain, as many as 70% of collaborative ventures are deemed failures (Harrigan 1988; Kogut 1989; Koza & Lewin 1999; Park & Ungson 2001; Spekman et al. 1998; Zineldin & Bredenlöw 2003). Few organisations achieve breakthrough performances in collaboration-enabled supply chains (Beth et al. 2003; Ellinger, Keller & Hansen 2006; Min, Mentzer & Ladd 2007). Notwithstanding their apparently attractive benefits, in reality they remain elusive, despite many years of investment in technology to facilitate the necessary agility (Beth et al. 2003). In Bleeke and Ernst's (1991) study of 59 alliances at least one partner deemed it a failure in about half the cases. In 2004 over 44% of surveyed firms had functions in place to enable both supplier and customer collaboration, yet only 35% of collaborative initiatives had moderate success (Kampstra, Ashayeri & Gattorna 2006). Surprisingly research has not managed to explain this outcome, despite considerable interest among scholars and practitioners alike in identifying causes of success and failure (Fawcett, Magnan & McCarter 2008a; Park & Ungson 2001).

Although necessary to recognise that collaborations are occurring in a context in which the survival rate of organisations themselves is low (Stubbart & Knight 2006), a range of arguments are presented in the academic literature proposing possible causes for this high failure rate. For example Sabath and Fontanella (2002) suggest that expectations of collaboration are too high and there is an over-reliance on technology which is contributing to the apparent failure rate. Mintzberg (1996)

suggests power imbalances can be a major source of failure in collaborations. Park (2001) provides a comprehensive review of collaborative venture failures and argues that despite the strategic advantages of collaborating, the interfirm rivalry and sheer management complexity involved leads to failure. The inherent complexity is often exacerbated by inadequate advance planning and a lack of resources and capabilities to manage the collaboration itself. The benefits of collaborating are similarly reduced by other factors such as choosing the wrong partner, changing strategy (Koza & Lewin 1999) or poor communication. These other factors can create barriers to successful collaboration at multiple levels within an organisation (Fawcett, Magnan & McCarter 2008a). These views corroborate Spekman's (1998, p. 747) comments that 'It would appear that while academics purport to understand the concept of alliance formation, the *practice* of alliance management continues to pose a significant challenge' (emphasis in original). Despite the high failure rate, the number of collaborations continues to increase (Gulati & Khanna 1994; Park & Ungson 2001; Todeva & Knoke 2005).

The inherent dynamism in collaborative ventures may, to some extent, be muddling the understanding of the initial drivers for their formation. As the effects of a collaborative venture accumulate throughout its life-cycle, it may become more difficult to separate the drivers and the effects. Further, with the multi-disciplinary nature of the interest in collaborative ventures, the risk of confusion of terms is compounded (Park & Ungson 2001). The benefits, effects, outcomes and gains of collaboration may be considered drivers over time. In order to gain clarity about the drivers of collaboration, it may be preferable to investigate newly-formed collaborations.

3.5.2   Strategic decisions to collaborate

Collaborative ventures are examples of rich sources of reciprocal flows between organisations that occur in a dynamic business ecosystem. Organisations are effectively part of a broader network, a system of interconnecting parts 'that are not centrally directed' (Ritter, Wilkinson & Johnston 2004, p 177). As this system develops, integrated networks of interdependent businesses are impacted (Christopher 1998). Effectively, collaborative ventures are a touch point for diverse, interacting systems, connecting key components of the business ecosystem.

Forming collaborative ventures occurs in this dynamic environment and may provide the rationale for organisations working together strategically (Child, Faulkner & Tallman 2005; Hodge & Greve 2007; Park & Ungson 2001), often utilised to cope with uncertainty (Spekman et al. 1998). For example, the increasing interest in the sharing and working together creating coopetition changes values and ways of thinking (Bengtsson & Kock 1999; Hurmelinna-Laukkanen & Ritala 2010; Song 2003). The organisation moves to a higher level of consciousness, 'accompanied by new core values and ways of thinking' with shifts in mental models arising from spiral dynamics (Stead & Stead 2013, p. 164). Collaborative ventures as subsystems are component parts of a human activity system that can be hierarchically arranged (Fisk 1967; Kuhn 1963; Lazer 1971; McKenna 1999; Sheth, Gardner & Garrett 1988). The boundaries between the collaborative venture, the parent organisations and the environment enable the interactivity and reciprocal flows. Reciprocal flows such as the movement of goods, factors of production and information within a marketplace encompass ways in which actions can reinforce or counteract each other (Senge 1990) as the exchange processes (Emery & Trist 1965) affect both the drivers

to form collaborative ventures and the outcomes of such activities. Although the collaborative venture may be at a lower level than the parent organisation, both levels will interact with, and be interdependent on, other elements and/or levels within the business ecosystem, such as government and financial institutions (Fisk 1967; Sheth, Gardner & Garrett 1988). Drivers to collaborate can originate from reciprocal flows in the business ecosystem at a societal level.

Containing reciprocal flows across fuzzy boundaries, decisions to form collaborative ventures are thus proactive agents of change that may themselves subsequently modify existing conditions in the business ecosystem (Katz & Kahn 1978; Miles, Snow & Pfeffer 1974; Pfeffer & Nowak 1976; Polonsky, Suchard & Scott 1997; Senge 1990; Zeithaml & Zeithaml 1984). Additionally with competitive pressures increasing the emphasis on the value of collaboration to reduce costs and improve customer satisfaction, there is increasing collaboration as organisations spiral towards new ways of thinking as a result of driving forces in the environment (Beck & Cowan 2006; Fawcett, Magnan & Fawcett 2010).

The strategic decision to collaborate is informed by intelligence relevant to long-term returns on investment such as market trends, competitor analysis and potential opportunities from changes such as deregulation from the business ecosystem (Aaker 1998). Strategic choices between activities are determined by perceived future benefits (Todeva & Knoke 2005). For any one organisation there are usually key drivers of change within an industry, sector or market that are more significant than each individual trend within the categories (Johnson, Scholes & Whittington 2005), including the behaviours of other, connected organisations (McFarland, Bloodgood

& Payan 2008). Strategic drivers may include improvements to productive capabilities, acquiring competitive advantage to increase profits or market share, accessing future business opportunities to grow and reducing uncertainties in their external or internal operating environment (Todeva & Knoke 2005; Webster 1999). The reciprocal flows and interrelationships between the organisation and the business ecosystem provide pathways for senior managers to become aware of changes that may drive the formation of collaborative ventures.

3.5.2.1 Classification systems for strategic drivers

To assist decision making, classifying the strategic drivers enables better analysis of their links to competitive advantage (Contractor & Lorange 1988; Koza & Lewin 1999; Nooteboom 2004; Todeva & Knoke 2005). With varied disciplinary perspectives interested in collaborative ventures there are no universally agreed upon classification system to better understand these drivers, nor agreement on the terminology itself. For example Lambert, Emmelhainz and Gardner (1996, p. 26) regard drivers as 'compelling reason(s)' to partner that create 'strategic benefits'; Schmoltzi and Wallenburg (2011, p. 553) discuss 'motives that drive' the formation of horizontal cooperations. Gallié (2010) has determinants, whereas Spekman et al. (1998) talk of rationales and Contractor and Lorange (1988) discuss strategic gains. To simplify discussions in this thesis, strategic driver is used to encompass these diverse terms, following the definition of Lambert et al.'s (1996).

For an organisation, strategic drivers to form collaborative ventures vary according to multiple factors in the business ecosystem and with organisation-specific characteristics (Todeva & Knoke 2005). Creating a classification scheme to

Table 3.1   Examples of classification schemes of key drivers

Authors	Examples of key drivers discussed
Contractor and Lorange (1988)	- Risk reduction - Economies of scale - Vertical quazi-integration
Kogut (1988)	- Opportunities for organisational learning - Lowest cost transaction cost - Improving strategic position
Nooteboom (2004)	- Efficiency (exploitation) - Competence (exploration) - Positional advantage (exploit + explore)
Todeva and Knoke (2005)	- Market seeking - Economies of scale - Risk reduction and risk diversification - Overcoming legal/regulatory barriers
Child, Faulkner and Tallman (2005)	- Learning - Skill substitution
Thomson and Perry (2006)	- Resource scarcity - Resource and risk sharing - Symmetrically wanted resources - History of collaboration - Complex issues - High levels of interdependence
Hodge and Greve (2007)	- Environment - Internal characteristics - Characteristics of CEO

accommodate this diversity is thus in itself complex. Further complexity is added with diverse literature interested in the entity as the basis for theoretical explorations. Consequently there is little congruence in classification schemes of the strategic drivers to collaborate. What is noticeable is the different emphasis placed on the potential for knowledge creation and transfer from collaborative ventures. With the importance of knowledge to sustainable competitive advantage and innovation this is unanticipated. To assist discussion, Table 3.1 is developed to provide a summary of some key authors and elements of their classification schemes for drivers to form collaborative ventures to demonstrate the variety.

Contractor and Lorange (1988) in their seminal publication in international business, focus on the strategic gains arising from the increasing use of negotiated joint arrangements. They classify the strategic contributions of such joint arrangements into seven areas for potential benefit, including risk reduction, economies of scale and vertical quasi integration. For the latter, Contractor and Lorange (1988) also acknowledge that there are other benefits, such as cost savings and incorporation of technological advances (Williamson 1975). Thomson and Perry (2006) suggest key antecedents, based in a literature review, include resource scarcity (Levine & White 1961), the need for resource and risk sharing (Alter & Hage 1993), each partner having resources the other partner needs (Gray 1989; Gray & Wood 1991; Pfeffer & Salancik 1978), previous history of collaboration (Radin 1996), complex issues (O'Toole 1997) and high levels of interdependence (Logsdon 1991). Neither of these classification schemes includes mention of knowledge creation, transfer or learning as a strategic driver.

In contrast, Kogut (1988) investigating motivating factors behind joint venture formations identifies that the creation of opportunities for organisational learning is one of three strong motivators, in addition to the motivation of being a lowest transaction cost alternative and enabling a better strategic position to be achieved. Child, Faulkner and Tallman (2005, p. 77) comment that these three motivating factors 'are in fact concerned with the overarching motive of enabling the partners to become more competitive in relation to their rivals in their chosen markets' stressing the link to the business environment. Similarly Spekman et al. (1998) in their review of alliance literature discuss both offensive reasons, such as competitive actions, accessing markets and setting industry standards, and defensive reasons focusing on protection, risk sharing and economies of scale (Bronder & Pritzl 1992; Ohmae 1989). Alliances' role in the facilitation of learning, for instance to access technology, and as a precursor to a merger or acquisition, are however discussed (Hamel 1991; Spekman et al. 1998).

Nooteboom (2004) provides another conceptual contribution from an inter-disciplinary approach, with a strong link to competitive advantage. He classifies the drivers into three distinct groups, namely efficiency, competence and positional advantage, justifying the chosen classification by whether the driver is for exploitation, exploration or both. Nooteboom (2004, p.37) suggests that efficiencies are exploitative, intended to maximise 'the usage of existing assets and competences'. His second classification refers to the exploration for new competences, for example through learning and innovation. Positional advantage is viewed as a combination of exploitation and exploration.

Arguing from an economic perspective Child, Faulkner and Tallman (2005, p. 79) suggest that there are two distinct rationales behind the formation of a collaborative venture, learning and skill substitution, but continue that in 'the complexity of an actual cooperative arrangement they may well get muddled, and substitution turn into learning, but both coexist conceptually as distinct rationales and they carry with them different risks'. Child, Faulkner and Tallman (2005) consider the drivers in terms of an organisation's external challenges and internal needs. They argue strongly that change in the external trading environment is one of two key motivations for forming a collaborative venture. Besides changes in the external trading environment, Child, Faulkner and Tallman (2005) suggest that the other key motivation to collaborate is a feeling of inadequacy or deficiency in terms of resources and/or skills. Internal needs such as achieving economies of scale or reducing R&D risks (Pfeffer & Nowak 1976; Porter & Fuller 1986) and achieving value-chain synergies can all be met by collaborating. Such perceived resource deficiencies can drive organisations to seek collaborative ventures.

Todeva and Knoke (2005), basing their analysis in international business and strategic management, suggest that organisations approach collaboration in the context of their internal issues, whilst considering economic benefits, strategic positioning and political manoeuvring. By drawing on a range of theoretical literature, they create a list of eighteen strategic motives that drive the formation of alliances, including market seeking, acquiring means of distribution and complementarity of goods and services to markets. Todeva and Knoke's (2005, p. 129) drivers are not collated into similar groups. Knowledge transfer is included as a driver. Todeva and Knoke (2005, p. 137) suggest that learning from their

collaborators is often either a 'primary goal or a derivative of other objectives, such as creating new products and technologies or penetrating new markets'.

Powell, Koput and Smith-Doerr argue (1996, p.117) there are 'two rather different strands of thinking about collaboration and learning'. The first strand views the decision to pool resources in a collaboration as strategic and it 'depends on calculations involving risk versus return' (Powell, Koput & Smith-Doerr 1996, p.117). The decision can then be analysed from a transaction cost perspective; the form of the collaboration depends on power positions of each firm and the particular skills and resources that are going to be exchanged (Hennart 1988; Parkhe 1993; Pisano 1989).

In contrast the second strand, based on learning as a social construction process, gives the context of the collaborative relationship more significance (Brown & Duguid 1991; Powell, Koput & Smith-Doerr 1996). From this view, learning occurs as a function of the context in which knowledge is created; a 'fluid and evolving' community generates more knowledge than the traditional, formal structure of some organisations for example (Powell, Koput & Smith-Doerr 1996, p.118). Being as collaborative ventures are dynamic entities that operate in an evolving environment, new knowledge will arise; the sources of new knowledge are not exclusively found in any one organisation (Powell, Koput & Smith-Doerr 1996; Senge 1990).

The foregoing discussion demonstrates that there is wide diversity in the strategic drivers to collaborate. Past experience of relationships, market position, joint resource capabilities and informational asymmetries can influence the level of

collaboration more than internal costs and benefits (Dietrich 2012). Todeva and Knoke (2005) observe that forming collaborative ventures is more driven by strategic intentions, rather than 'retrospective economic rationalities' (Todeva & Knoke 2005, p. 128). They argue that the decision is formed to achieve a joint purpose which is emerging from the organisations' current situations, based on expectations of future benefits. Decisions to collaborate are neither responsive, nor determined rationally based on a specific purpose or compelling pressures in the business ecosystem. Such factors enable organisations to 'construct post-facto justifications and rationalizations' (Todeva & Knoke 2005, p. 129). The decision to form a collaborative venture is driven more by strategic intent to achieve future goals that improve the circumstances of all organisations involved, and for the created entity.

3.5.3 Collaboration and dynamic effects

The degree of separation in collaborative ventures between the drivers and the outcomes is difficult to judge over time. In a dynamic business environment the drivers to collaborate, that is the strategic intent, and the outcomes may change over time after going through the black box that is collaboration (Thomson & Perry 2006). Consequently initial reasons for the venture, such as access to markets may change and become, say, improved customer service as the market is established. What drives organisations to collaborate in the first instance and what they perceive to be the benefits in the long-run are thus difficult to separate (Child, Faulkner & Tallman 2005). Park and Ungson (2001, p. 50) note that as collaborative cycles finish, the participants will review the outcomes in terms of 'efficiency, equity, and goal attainment' prior to imitating 'a new loop of negotiation, commitment, and execution

of cooperation'. It appears that what need to be studied are both the strategic intent and the outcomes.

Thomson, Perry and Miller (2008, p. 102) observe that this is difficult as conceptualising the relationship between the process and its outcomes is not straightforward, due to the theoretical perspective that can be adopted (Gray & Wood 1991) to both what the outcomes themselves are and whether or not they are deemed successful (Park & Ungson 2001; Thomson, Perry & Miller 2008). In Sandberg's (2007) study of Swedish manufacturers, over 95% cited service factors and 72% cost factors as the driving force for collaboration. In analysing the effects though, more intangible gains were also noted including increased competitiveness, more measurement and follow ups and clearer division of responsibilities.

Hardy, Phillips and Lawrence (2003) offer an alternative approach to many by focusing more on the effects of collaboration, rather than the drivers. Approaching collaborative ventures from a multi-disciplinary approach, they highlight the roles of knowledge and knowledge creation. They separate collaboration effects based on three groups of literature, namely strategic, learning and political. However, their grouping results in knowledge being separated from knowledge creation, with knowledge considered a resource that can be acquired for strategic gain. Their strategic category includes the development of distinctive capacity (Barney 1991; Dyer & Singh 1998; Hamel & Prahalad 1989; Peteraf 1993; Porter 1996; Powell, Koput & Smith-Doerr 1996; Prahalad & Hamel 1990; Wernerfelt 1984), and the pooling and transfer of key resources, including knowledge (Gulati, Nohria & Akbar 2000) that enables sustainable competitive advantage through collaboration.

Knowledge creation is categorised differently; Hardy, Phillips and Lawrence (2003, p. 326) argue that 'networks of collaborating organizations are an important source of knowledge creation' and that 'new knowledge grows out of the sort of ongoing social interaction that occurs in ongoing collaborations'. However this raises the difficulty of determining at what point new knowledge becomes a resource for strategic gain and ceases to be knowledge creation in this approach.

Hardy, Phillips and Lawrence's (2003) final category relates to the political effects of collaboration, particularly in regards to the network of interactions and patterns of relationships of each organisation. Based in network theory (Burt 2004; Granovetter 1973; Moliterno & Mahony 2011) an organisation's linkages both facilitate and constrain their activities providing influence and being influenced by the other organisations within the network to varying degrees. Consequently the effects of one collaborative venture will be felt to some extent by every organisation throughout the network.

It is the network effect that is quite significant to the benefits of collaboration. Within the supply chain management literature for example, there is acknowledged significance of information sharing to the strategic benefits of collaboration in processes (Fawcett et al. 2012). However there is less recognition of collaboration's role in accessing and creating knowledge. Recently researchers have begun to focus on the knowledge effects of collaboration, recognising that its contribution to knowledge transfer, creation and innovation is one of its main effects (Hansen & Nohria 2004; Houldsworth & Alexander; Lane & Probert 2007; Nielsen 2005; Soosay, Hyland & Ferrer 2008) particularly due to the learning effects. Witzel (2006)

for example suggests that by sharing knowledge, complementary skills and ideas, innovation can flourish; collaboration is thus critical to innovation. Many companies successfully utilise this approach, such as both Sony and Honda building internal innovation teams for new projects; Airbus Industrie to grow market share and for new designs; and other firms, such as Nokia, using collaborations for R&D (Witzel 2006). BP Plc, with operations in over 100 countries, transformed itself into a collaborative organisation, with key gains being the implementation of over 150 new ideas, a twenty per cent reduction in working capital required and projects being brought in on time (Hansen & Nohria 2004), demonstrating the powerful effects of internal collaboration on knowledge creation, innovation and business efficiency.

Collaboration leads to knowledge creation as part of the informal relationships that arise in the venture (Håkansson 1990); the more collaborative ties an organisation has, the more likely it is to create knowledge (Powell, Koput & Smith-Doerr 1996). Building on the social constructionist perspective and studying innovation in inter-firm alliances (Powell, Koput & Smith-Doerr 1996) it is suggested that knowledge is created in the context of community, for example a community of practice (Brown & Duguid 1991) or through networks of collaborating firms (Powell & Brantley 1992) as new knowledge grows out of social interaction (Hardy, Phillips & Lawrence 2003). Additionally the inherent tension between an organisation's self-interest and the collective interest of the collaboration can hold the potential for creativity, as disequilibrium stops systems falling into the stability trap (Thomson, Perry & Miller 2008). Operating at this edge of chaos enables latent synergies and new ideas to emerge (Levy 1994; Wheatley 2006). Collaborations then provide an ongoing source of the potential for knowledge creation.

Mintzberg et al. (1996) endorses this view, by suggesting three general insights into collaboration, based on observations from inter-departmental new product development processes and people often unknowingly learning from each other. Firstly 'people do not always realize, at least overtly, what they learn from each other, sometimes not even that they learn from each other' (Mintzberg et al. 1996, p. 63). Secondly being part of actual collaboration practice, working together, is how new knowledge is created in the context and practice of the new product process. Thirdly people with different backgrounds and perspectives tend to learn different things, so it is important to trust and appreciate expertise. Given the social interaction that must occur in any form of collaborative venture it is noticeable that the knowledge effects are not more widely acknowledged in the literature. This may be because organisations enter into collaborative ventures for a range of strategic reasons, the drivers, and are unaware that the process will, in itself, create effects such as knowledge creation as an intangible benefit (Håkansson 1990; Hardy, Phillips & Lawrence 2003); alternatively organisations may not recognise or value that as an outcome. This reinforces the importance of the initial strategic intent.

 The intent to create and transfer knowledge is complicated by the management of the structures of a collaborative venture due to their impact on social interaction (Ibarra 1992; Spekman et al. 1998). Little is known about how a learning alliance works (Grant & Baden-Fuller 2004; Khanna, Gulati & Nohria 1998) and that without absorptive capacity difficulties in knowledge transfer will occur (Inkpen & Pien 2006). Another key element to achieve knowledge effects is managers who are committed to life-long learning, with the key communication strengths of listening,

being reflective and open to new ideas and risk taking (Kotter 1996; Spekman et al. 1998).

The topics discussed in this chapter indicate that Figure 2.1 can be adapted to include strategic intent and the outcomes of collaboration, namely its effects. These are included in Figure 3.4 below. From the preceding discussions it is apparent that there is a need to investigate further how strategic intent may link to knowledge creation and transfer in collaborative ventures, what drives the formation of collaborative ventures and if knowledge creation and transfer are effects.

Figure 3.4   Strategic intent and collaboration effects
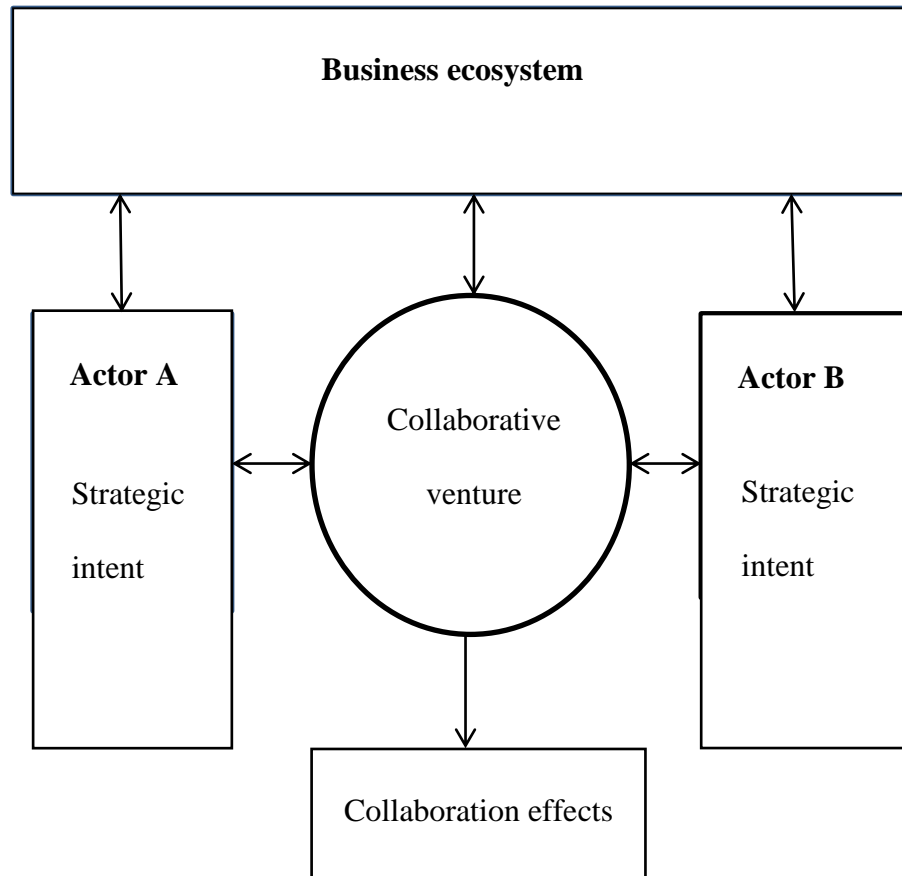
Collaboration effects include knowledge creation and transfer. The next chapter seeks to better understand knowledge creation and transfer, including the role of absorptive capacity.

3.6   Summary

Collaborative ventures are entities created through mutual intention for joint activity or activities, which connect actors in the dynamic context of the business ecosystem. Collaboration itself is an elusive concept that is inherently complex. Further complexity is added by the various arrangements that they can adopt such as strategic alliances and collaboration-enabled supply chains. Moreover the diversity of scholarly and practitioner interest in collaboration has resulted in a broad range of definitions.

Collaborative ventures are a rich source of reciprocal flows between organisations that occur in a dynamic business ecosystem. Operating in the business ecosystem, collaborative ventures are sub-systems that co-evolve, with their flexibility enabling exchange relationships from diverse, interacting systems. Benefits include observing significant trends and accessing information that may inform strategic decision making to help ensure both a sustainable organisation and a successful collaborative venture through strategic renewal.

Although often discussed as static entities, collaborative ventures are dynamic with an interactive process at their centre. Within these central processes are people, their relationships and systems, creating interdependencies. Collaborative ventures are formed to either exploit or explore opportunities, providing strategic benefits to the

organisations involved. Over time the initial strategic drivers may change as the collaborative venture evolves, with new opportunities and ideas emerging generating collaboration effects. Research has indicated that the organisation's strategic intentions may drive collaborative venture formation rather than economic rationality.

With increasing collaborative ventures there are more opportunities to both create knowledge with, and transfer knowledge from, other organisations. With knowledge creation and transfer being a key driver and effect of a collaborative venture, the subsequent chapter investigates knowledge creation and transfer, with a view to identifying the role of strategic intent and context on its emergence.

Chapter 4 Interactivity, knowing and absorptive capacity

4.1 Introduction

Collaborative ventures and their relationships offer wide opportunities to enable knowledge production and diffusion (Powell & Grodal 2005; Wuchty, Jones & Uzzi 2007), accessing other organisations and their resources, which includes new knowledge (Kogut & Zander 1992). Besides its value as a resource in itself for innovation, such knowledge enables existing resources and capabilities to be effectively harnessed in novel combinations, creating new knowledge (Nelson & Winter 1982; Nonaka & Takeuchi 1995). Access to new knowledge thus provides opportunities for an inimitable competitive advantage within an organisation (Adner & Kapoor 2010; Garcia, Calantone & Levine 2003; Hernández-Espallardo, Sánchez-Perez & Ségovia-López 2011; Song & Thieme 2009) including broadening the knowledge base (Bierly, Damanpour & Santoro 2009; Hernández-Espallardo, Sánchez-Perez & Ségovia-López 2011) and co-creating new knowledge through interactivity (Chapman, Soosay & Kandampully 2003). Processes involved in collecting and disseminating market intelligence provide sustainability as they are hard to imitate; embedded knowledge is an asset that is difficult to replicate (Lyles & Salk 1996; Teece 1988; Tsai 2001; Vargo & Lusch 2004). Knowledge and its exploitation are thus key considerations for organisational strategists to achieve success and sustainability when interacting in a collaborative venture.

Interactivity and knowledge in the organisational context of collaboration are studied in this chapter to identify how knowledge is transferred and created. Given that a collaborative venture is, from an interactionist perspective, a collision between two social worlds (Strauss 1978), the starting point is the role of interactivity to these

knowledge flows. Absorptive capacity is a critical element of the interactive environment and is discussed later in this chapter.

4.2   Knowledge

Knowledge is widely dispersed throughout an organisation and has many forms, such as explicit and tacit. The quality of that knowledge appears in the capabilities that the organisation possesses (Larsen 2001; Schotter & Bontis 2009; Spender 1996; Tsoukas 2005). Although such knowledge is in the minds of individuals, the organisation provides the context for it to take on both meaning and purpose (Choo 1998). The management of an organisation's information, knowledge and associated capabilities has been of increasing interest since the 1970s. Interest grew markedly following the seminal publication of Nonaka and Takeuchi's (1995) book, with its implications for knowledge management and competitive advantage. Competitive advantage depends on knowledge management, the 'ability to create, transfer, utilize and protect difficult-to-imitate knowledge assets' (Teece 2000, p. 35). Deriving from diverse social relationships within this context of an organisation (Cavusgil, Calantone & Zhao 2003), close relationships enable effective knowledge transfer to occur and are difficult to easily replicate (Cummings 2002`). Given that 'knowledge sharing itself can often be the basis for competitive advantage' (Teece 1998, p. 60) and shared problem solving builds knowledge (Leonard-Barton 1992), better understanding of knowledge and the knowledge sharing processes to both knowledge transfer and creation is critical to its effective management to develop a sustainable competitive advantage. The next section explores two perspectives on knowledge as

they have different implications for how knowledge transfer and creation is approached for its effective management.

4.2.1 Two different perspectives on knowledge

Knowledge has been studied extensively since early Greek philosophers through to modern day educators (Blumentritt & Johnston 1999; Tsoukas & Mylonopoulos 2004). Interest in knowledge has come to the fore over more recent decades in the management streams of literature, with increasing recognition of its value to innovation (Easterby-Smith, Lyles & Tsang 2008; Jansen, van den Bosch & Volberda 2005; Pitt & MacVaugh 2008; Tsai 2001), sustainable competitive advantage (Priestley & Samaddar 2007; van Wijk, Jansen & Lyles 2007; Von Krogh, Nonaka & Aben 2001), enhanced agility (Dove 2003), productivity and improved levels of performance (Hult, Ketchen & Slater 2004; Lyles & Salk 1996; Wiig & Jooste 2003) and maximised usage of knowledge assets (Teece 1998). Information is factual and forms the basis for knowledge (Zhang 2008), which resides in an agent who 'establishes generalizations and correlations between variables' (Saviotti 1998, p. 845). Knowledge involves some action to achieve an end in contrast to information (Nonaka & Takeuchi 1995). New information cannot therefore be understood and used without also having an understanding of context and cognition (Saviotti 1998`).

There are difficulties defining knowledge and understanding its inherent complexities focused on the central debate regarding its nature, which began centuries ago with the Greek philosophers. Part of the difficulty lies in the differences between two key epistemologies of knowledge, namely objectivist and

practice-based (Hislop 2005). In the objectivist perspective, knowledge can be possessed, existing separately to people. Being objective, general laws and principles can be established (Chia 2002; Gherardi 2009; Nonaka 1994). Thinking is then considered a way of building on previous knowledge, a structural approach, with concrete additions that can be categorised and labelled (Chia 2002; Murray & Blackman 2006). Knowledge can be transferred via formal and systematic methods such as official statements, rules and procedures. Tacit knowledge is seen as separate from explicit knowledge, frequently considered the intellectual capital of the organisation (Maskell & Malmberg 1999; Sharkie 2003). Explicit and tacit knowledge are regarded as distinctive, quite separate forms.

In contrast to the traditional view, the practice-based perspective sees human activity as central to knowledge; knowledge is considered to be embedded in practice (Cook & Brown 1999; Nicolini, Gherardi & Yanow 2003). Knowledge is thus socially-constructed, culturally embedded and multi-dimensional (Berger & Luckmann 1967; Easterby-Smith 1997). In this perspective, the notion that knowledge itself is an entity is challenged, with key proponents arguing that it cannot be separated from human activity (Blackler 1995; Gherardi 2000; Nicolini, Gherardi & Yanow 2003). Further it is not purely cognitive (Orr 1990; Patriotta 2003), all work is knowledge work (Alvesson 2000; Alvesson & Kärreman 2001) and that all knowledge is 'dynamic and provisional' (Nicolini, Gherardi & Yanow 2003, p. 3). From this perspective, knowledge is an evolving, social resource that needs to be strategically analysed and managed (Blumentritt & Johnston 1999; Sharkie 2003; Von Krogh, Nonaka & Aben 2001). Such strategic analysis and management is difficult to

achieve however and there is no definitive best practice as yet from this perspective to maximise the benefits.

In the practice-based perspective, tacit knowledge is conceptualised as part of the spectrum of knowledge, with all knowledge having some tacit dimensions; tacit and codified knowledge are not mutually exclusive (Polanyi 1969`). Tacit knowledge is possessed by people but cannot be expressed and therefore codified for exchanging (Teece 1998`). Tacit knowledge is therefore critical to competitive advantage. Tacit knowledge is difficult to actualise and usually acquired in an unconscious or semi-conscious process which reflects its effortlessness (Gertler 2004; Polanyi 1966; Schack 2004; Tranfield et al. 2004). It can be shared by any of 'observation, narration, imitation, experimentation, and joint execution', or a combination of them (Von Krogh, Ichijo & Nonaka 2000, p. 84). Managers for example develop practical skills and specialised knowledge of strategic planning through meetings, say, which is not easily codified; it takes time and experience to acquire (Penrose 1959`). It is usually acquired individually for instance through experience, reflection and interactive conversation and storytelling (Tua 2000).

4.2.2 Knowing and context

Practice-based studies developed more prominence in the 1990's as 'the resource "knowledge" proved difficult to grasp using the traditional categories of organizational analysis', (Gherardi 2009, p. 353). Simultaneously organizing developed as a concept rather than organization (Clegg & Hardy 1996). There was thus a degree of symbiosis in knowledge becoming considered more as knowing (Cook & Brown 1999; Jakubik 2011). Knowing is an activity and process that

develops over time, situated in space, occurring in the social world of work practices (Blackler 1995; Gherardi 2009; Orlikowski 2002). Cullen (1999) for example indicates that knowledge cannot be separated from its social context as learners actively construct meaning through the interaction of information and context, in the framework of their own, individual experience and existing knowledge (Ortony 1993). Individual learning depends upon a person's abilities and characteristics yet cannot be separated from the social context which provides support and engagement enabling learning to occur (Štrach & Everett 2006). The learning process within the organisation is reciprocal and ongoing; the individuals then learn from the organisation (Santos-Vijande, Lopez-Sanchez & Trespalacios 2012).

Gherardi (2000, p. 218) suggests that 'practice connects 'knowing' with 'doing''. Murray and Blackman (2006, p. 134) remark this processual, or constructivist, perspective suggests 'an individual brings forth a unique view of the world that cannot be easily framed and transferred'. Knowing develops 'in human, dynamic, emerging, evolving, processes and it is both an individual and collective knowing' (Jakubik 2011, p. 386). Effective sharing of tacit knowledge requires a common social context (Gertler 2004; Hodgson 1988), with habits and routines to carry knowledge (Hodgson 1988; Maskell & Malmberg 1999; Nelson & Winter 1982). Viewing knowing as being embedded in practice means that how to acquire tacit knowledge becomes critical in management and organisation studies.

The social context facilitates knowledge flows in an organisation. Context is an active part of an extended cognitive system that co-creates knowledge (Clark 1997; Hollan, Hutchins & Kirsh 2000; Lakomski 2004; Rogoff & Lave 1984). A shared

context, or ba, comprising physical, virtual and mental spaces can be managed to support knowledge flows to stimulate knowledge creation (Chun Wei & Rivadávia Correa Drummond de Alvarenga 2010; Nonaka & Konno 1998; Nonaka, Toyama & Konno 2000). It is the individual's own cognitive, emotive and volitional processes that give meaning to feedback from the environment (Ringberg & Reihlen 2008; Weed 2003). Knowledge then requires both a cognitive and an environmental context (Bunge 1996; Lakomski 2004; Ringberg & Reihlen 2008; Weed 2003; Wood & Bandura 1986); a degree of proximity is required (Rieber 1998). Adaptation occurs through a process of information acquisition, knowledge dissemination, shared interpretation and organisational memory (Huber 1991; Hult & Ferrell 1997; Kandemir & Hult 2005; Santos-Vijande, Lopez-Sanchez & Trespalacios 2012; Sinkula 1994; Slater & Narver 1995). In collaborative ventures, senior managers create the shared context, manage and facilitate knowledge flows and knowledge creation, besides being responsible for maintaining the organisational memory.

4.2.3 Knowledge defined

Similar to other concepts discussed in this thesis, a widely accepted understanding of knowledge continues to be elusive despite its strategic significance. Knowledge is a complex concept that is difficult to delineate, especially with the large number of frames of reference being applied to the concept (Schneider 2007). There is a multiplicity of potential definitions. Schneider (2007, p. 619) comments there exist 'a multitude of unclear, all-inclusive definitions that draw on other unclear and all-inclusive concepts, such as learning, experience and capabilities'. Evidently there are many dimensions on which knowledge can be defined (Teece 1998). There is an epistemological paradox as knowledge is part of a dynamic social system; acquiring

knowledge changes the system (Boulding 1966; Schneider 2007). For this thesis the following widely cited (for example Mir, Banerjee and Mir (2008); Noorderhaven and Harzig (2009); Baskerville and Dulipovici (2006)) definition of knowledge is adopted:

> A fluid mix of framed experience, value, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organisations, it often becomes embedded not only in documents or repositories but also in organisational routines, processes, practices, and norms (Davenport & Prusak 1998, p. 5).

This definition highlights some critical issues relevant to knowledge creation and transfer in collaborative ventures evident from the above discussion of knowledge. In particular the difference between know-how and know-that is not discrete but interdependent (Mir, Banerjee & Mir 2008; Ryle 1949). Knowing how to play cricket is different to knowing the rules of the game; knowing how is the ability to put into practice the knowing that (Brown & Duguid 1998). Knowledge flows within a collaborative venture are dynamic and fluid; knowing how to collaborate for example is not sufficient to ensure that knowledge is created and/or transferred within it.

Secondly the role of the individual in the creation of knowledge is evident. Within organisational settings such as a collaborative venture, a major challenge is making knowledge appropriable for the organisation. It needs transforming into social knowledge that is more widely accessible (Mir, Banerjee & Mir 2008). The social and cultural context of the organisation is significant to both knowledge creation and transfer processes. It affects how individuals gain knowledge through learning

processes and contributes to the identity of both individuals and the organisation (Brown & Duguid 2001).

Finally this definition stresses the significance of communication to knowledge processes (Kogut & Zander 1996; Mir, Banerjee & Mir 2008). Without communicability knowledge cannot provide value. Traversing boundaries, both inter- and intra-organisation by codification and routines is necessary as knowledge is distributed (Becker 2001; Tsoukas 1996) and it is not feasible to centralise all knowledge within an organisation to achieve any one goal (Hayek 1945). Within a collaborative venture then knowledge transfer is problematic without communication and connectivity. Adding complexity is the distributed nature of the knowledge flows through the connections.

4.2.4 Organisations as distributed knowledge systems

People and their embedded knowledge, skills and expertise form part of an organisation's knowledge base, contributing to a knowing organisation (Adler & Kwon 2002; Cabrera & Cabrera 2005; Choo 1998; Felin, Zenger & Tomsik 2009; Laycock 2005). A knowing organisation is adaptable, engaging in continuous learning and innovation that create sustainability, providing many opportunities for knowledge creation through interactivity (Nicolini, Gherardi & Yanow 2003) by bringing together diverse knowledge, expertise and activities (Felin, Zenger & Tomsik 2009). Consequently they are increasingly being seen as pivotal to long-term business sustainability, particularly their ability to search, access, transfer absorb and apply knowledge to create new knowledge effectively and efficiently (Galunic & Rodan 1998; Nahapiet & Ghoshal 1998; Phelps, Heidl & Wadhwa 2012).

Knowledge flows between people throughout organisations and collaborative ventures, including the integration of distributed knowledge (Cabrera & Cabrera 2005`). Both the knowledge base of the people and flows incorporate explicit and tacit knowledge. In a collaborative venture gaining access to explicit knowledge is not necessarily difficult but accessing tacit is far harder. However given that knowledge always contains elements of both explicit and tacit knowledge, trying to separate them and creating a dichotomy may not be of value (Hildreth & Kimble 2002). Yet managers have for long tried to treat them differently. Both the hard and soft sides of knowledge need to be considered to create value, taking the dialectic and dual nature into account. 'All knowledge is enacted in skills and attitudes that result from shared experiences' (Pahl-Wostl et al. 2007). Individual managers are more than 'mere processors of information … they are members of social practices whose knowledge derives, to a large extent, from such membership' (Tsoukas & Mylonopoulos 2004, p. 5). Tacit knowledge, being difficult to imitate, is critical to the strategic management of an organisation's knowledge base and flows.

An organisation's tacit knowledge web effectively becomes one of the organisation's key sources of competitive advantage (Burton & Pennotti 2003; Cavusgil, Calantone & Zhao 2003). With this advantage, it can realistically differentiate itself from other organisations that can easily re-engineer and copy many other sources of competitive advantage or benchmark best-practices (Coff, Coff & Eastvold 2006; Cummings 2002; Porter 1985, 1996). Within an organisation, knowledge has a collective character, creating a knowledge base which can be defined as 'the collective knowledge that the firm uses for its productive purposes' (Saviotti 1998, p. 845). An

organisation's knowledge web is an asset of the collective, which, when managed strategically contributes to competitive advantage.

In a knowledge web, organisational knowledge is essentially distributed (Becker 2001; Choo 1998; Lakomski 2004; Larsen 2001; Tsoukas 2005; Tsoukas & Mylonopoulos 2004), unique and may be found in both the heads of individuals, groups of individuals or more widely dispersed (El Louadi 2008; Felin, Zenger & Tomsik 2009). Senior managers who are developing strategy in situations where knowledge is fundamentally dispersed for example cannot possibly know it all (Larsen 2001; Mintzberg 1990; Tsoukas 1996). Tsoukas and Mylonopoulos (2004, p. 7) observe 'the locus of understanding is not so much in the head as in *situated practice*' (emphasis in original). Increasingly it is being recognised that organisations are dependent on their people who enable growth and learning through their activities and contributions (Alvesson 2000; Felin, Zenger & Tomsik 2009; Larsen 2001; Tsoukas & Mylonopoulos 2004). Such activities and contributions reflect the services rendered by an organisation's resources, including its people; for example they develop and execute the routines that carry knowledge and create novelty by their interactions (Larsen 2001; Tsoukas 1996). Knowledge transfer and creation are critical to accessing the advantages of a distributed knowledge system.

Additionally, regarding an organisation as a distributed knowledge system enables interpretation and seeing 'how coherent action emerges over time' (Larsen 2001, p. 86). Communal groups, such as collaborative ventures enable connectivity as they form nodes in distributed networks where knowledge can be competitively and cooperatively exchanged and produced (Felin, Zenger & Tomsik 2009). However it

can be difficult to store and retrieve knowledge as it is never complete and partly originates from outside the organisation (Tsoukas 1996). Within the knowledge web Tsoukas (1996, p. 22) suggests that people within the organisation need to find 'more and more ways of getting connected and interrelating the knowledge each one has'.

Managing distributed knowledge is thus a complex task, particularly as an organisation's key competitive capability is 'to create and transfer knowledge within an organizational context' (Kogut & Zander 1992, p. 384). The shift to more distributed forms of organisation presents challenges to such processes (Powell, Koput & Smith-Doerr 1996; Tang 2011). Von Krogh, Nonaka and Aben (2001) contend that there are two core knowledge processes, namely knowledge transfer and knowledge creation, which are critical to both competitive advantage and the outcomes of collaborative ventures. Consequently to better understand knowledge processes in collaborative ventures both transfer and creation are investigated.

4.3   Knowledge transfer in collaborative ventures

Knowledge transfer is significant to competitive advantage (Easterby-Smith, Lyles & Tsang 2008; Lyles & Salk 1996; Tsai 2001; Tsai & Ghoshal 1998). Kogut (1992, 1993) suggests that the difficulties inherent in transferring knowledge partly explain enduring differences in organisations' capabilities, enabling sustainable competitive advantage to be developed. Knowledge is transferred through a range of events and activities in an organisation, for instance transferring people from one department to another, setting up cross-functional teams and establishing routines; it therefore can be managed (Inkpen 2008). By transferring knowledge an organisation can develop itself and evolve towards its potential (Štrach & Everett 2006).

Knowledge transfer is not easy to achieve (Easterby-Smith, Lyles & Tsang 2008; Szulanski 1996; Zellmer-Bruhn 2003). It represents a cost in terms of time and effort (Hansen 1999; Reagans & McEvily 2003). Transfer cannot be assumed to occur; it is selective (Darr, Argote & Epple 1995) and as a phenomenon it is hard to capture (van Wijk, Jansen & Lyles 2007). Despite creating 'exponential benefits from the knowledge as people learn from it' (Awad & Ghaziri 2004, p. 10), positive outcomes from knowledge transfer are frequently less apparent. Further there are few empirical studies that link 'the properties of knowledge to its transfer across organizational boundaries' (Simonin 1999, p. 596) so understanding of the processes is weak (Huber 1991; Zellmer-Bruhn 2003).

Traditional thinking of knowledge as object is partially responsible for this limited understanding. Fowler (2007) for example argues that knowledge transfer relies on a positivist stance with the conduit metaphor (Reddy 1979) underpinning transfer, assuming 'both a transparency and universality about knowledge and a transmission model of teaching and learning' (Fowler & Lee 2007, p. 182). This can be seen for example in prevailing discussions that knowledge transfer is primarily one-way (Carlile 2004; Ko, Kirsch & King 2005), with an element of path-dependence at play. Knowledge flows from the top-down, with companies captives of their past (Araujo & Rezende 2003). The possibility for reverse knowledge transfer is little acknowledged (Schotter & Bontis 2009). Knowledge is seen as an object that is transferred in one direction.

The common stock of knowledge and a shared language within an organisation facilitates knowledge transfer (Berger & Luckmann 1967; Katz & Kahn 1966). van

Wijk, Jansen and Lyles (2008, p. 832) suggest that organisational knowledge transfer is 'the process through which organizational actors – teams, units or organizations – exchange, receive and are influenced by the experience and knowledge of others'. From this perspective, knowledge is clearly not an entity that can be transmitted, but has a wider conceptualisation (Argote & Ingram 2000; Darr & Kurtzberg 2000; Ko, Kirsch & King 2005). Similarly Ringberg (2008, p. 913) argues that knowledge transfer is both a 'process and an outcome by which an individual is affected by the experience of others'. Thompson, Jensen and DeTienne (2009) also take this wider view of knowledge transfer by including the receiver in their model of the process, arguing that this inclusion addresses a deficiency of many other existing models. The stock of knowledge and language in each organisation is different. When crossing organisational boundaries, knowledge transfer cannot be assumed to occur.

Transferring knowledge in a collaborative venture is difficult due to barriers created by cultures, process and the multi-faceted nature of boundaries between organisations (Easterby-Smith, Lyles & Tsang 2008). Organisational knowledge transfer requires integration (van Wijk, Jansen & Lyles 2008) which can be seen by changes in performance or the organisation's knowledge base (Argote & Ingram 2000). Pertinent to the knowledge processes that occur in a collaborative venture are the antecedents of knowledge transfer, namely ambiguity, absorptive capacity and disseminative capability. Absorptive capacity is critical to both knowledge transfer and creation and is discussed in more detail later in this chapter. The following section explores ambiguity and disseminative capability in more detail.

4.3.1 Antecedents of knowledge transfer

Ambiguity is an important predictor of organisational knowledge transfer (Birkinshaw, Nobel & Ridderstrale 2002; Daft & Lengel 1986; Simonin 1999; Szulanski, Capetta & Jensen 2004) as it affects the ease with which tacit sources of knowledge can be communicated, interpreted and absorbed (Kogut & Zander 1992; van Wijk, Jansen & Lyles 2007). Ambiguity, or equivocality (Weick 1979), is 'the existence of multiple and conflicting interpretations about an organizational situation' (Daft & Lengel 1986, p. 556). Arising from the effects of tacitness, specificity and complexity (Reed & DeFilippi 1990), ambiguity negatively affects knowledge transfer between organisations, but 'hampers knowledge acquisition more strongly than knowledge exchange' (van Wijk, Jansen & Lyles 2007, p. 844) and is therefore likely to impede transfer between organisations in a collaborative venture. Simonin (1999) demonstrates the significance of knowledge ambiguity in his investigation into international alliances with a random sample of senior executives in large and medium-sized companies in USA. He found that there was a consistent effect on tacitness from ambiguity, showing that the more codifiable and teachable the knowledge, the higher the chance of rapid dissemination (Zander & Kogut 1995). Transferring causally ambiguous and complex knowledge may require adaptation and reconstruction (Attewell 1992). The process relies on the knowledge sender's attitudes, prior experience and behaviours to ensure that the receiver understands (Minbaeva & Michailova 2004). van Wijk, Jansen and Lyles (2007, p. 844) note that in collaboration, partners are probably working 'more closely and actively, using richer media', facilitating a better understanding of causally ambiguous knowledge

(Daft & Lengel 1986). Such close interactions will help reduce the difficulties of transferring causally ambiguous knowledge.

Senior managers accelerate knowledge dissemination with their expert status and well-developed communication and social skills. Their involvement in collaborative ventures may enable more rapid transfer of the knowledge available from the collaborative process. Senior managers can be knowledge hubs, the dominant knowledge holders (Tang 2011). Tang (2011, p. 280) suggests that having a well-connected hub will 'more quickly accelerate knowledge transfer to reach the knowledge equilibrium', drawing on Goldenberg, Han, Lehman and Hong's (2009) and Stephen and Toubia's (2009) work on network connectivity of hubs. Moreover senior managers' willingness and intention to share are critical to the propensity to share. Transferring knowledge is decided by both ability and willingness to share (Hansen 1999; Husted & Michailova 2002; Minbaeva & Michailova 2004) and being motivated to do so (Vroom 1964). By establishing the work practices of the organisation, senior managers can foster perceived norms relating to knowledge sharing and influence the intention to share. Factors such as trust, obligation, reciprocity and social personality traits all contribute to a person's willingness to share and transfer knowledge through their impact on the environment and the individual (Cabrera & Cabrera 2005).

There is a degree of teaching required to transfer the tacit knowledge components involved in transfer (Easterby-Smith, Lyles & Tsang 2008; Štrach & Everett 2006; Winter 1987). Sound communication and articulation skills (Minbaeva & Michailova 2004) and the motivation to both teach and learn (Easterby-Smith, Lyles & Tsang

2008; Ko, Kirsch & King 2005) are thus necessary to dissemination. As Noorderhaven and Harzig (2009) remark, merely having a communication channel available is not a sufficient condition for knowledge to flow; social interaction is necessary to strengthen other motivating factors. Dissemination can thus occur for example through informal, face-to-face mechanisms, which provide conditions that are strongly conducive to knowledge sharing (Jelinek & Schoonhaven 1990). Social interactions can take the form of cross-national teams, task forces, inter-business unit visits and training (Björkman, Barner-Rasmussen & Li 2004; Persson 2004; Subramaniam & Venkatraman 2001). Critical communication and other dissemination abilities can be developed through involvement, education and training for instance. Senior managers thus have responsibility to ensure their own skills and abilities for dissemination are highly developed. Secondly building and developing key knowledge transfer skills and abilities throughout the organisation to ensure the benefits of knowledge transfer are optimised.

To date the literature on knowledge transfer is mainly approaching the topic from the epistemology of possession perspective, effectively indicating that the social aspects, interactivity and the context itself are not important to the process. However, knowledge transfer provides opportunities for individuals to convey messages about their observations and ideas (Von Krogh, Roos & Slocum 1994) inextricably linking it to knowledge creation. A collaborative venture is a social community that creates and communicates knowledge (Zander & Kogut 1995); an epistemic community (Kogut & Zander 1992) is created in which both knowledge creation and transfer are significant. The dividing lines between knowledge creation and transfer are not always clear.

4.4   Knowledge creation

Involvement in a collaborative venture is the result of strategic drivers to achieve benefits for the organisations involved. Innovation and learning are strategic benefits that can arise from an organisation's involvement in a collaborative venture. Knowledge creation is central to innovation, which arises from the combination of shared existing knowledge and new knowledge (Almeida, Phene & Grant 2003; Kogut & Zander 1992). The human activities and practices present in collaboration contribute, knowledge creation being 'a social as well as an individual process' (Von Krogh, Ichijo & Nonaka 2000, p. 8); it develops through human interactions yet is created by individuals (Boisot & MacMillan 2004; Gourlay 2006; Nonaka & Takeuchi 1995). Cognition and social context are thus both significant to the process (Felin, Zenger & Tomsik 2009). Knowledge creation is 'a process of realizing one's personal vision of the future or personal belief through the practice of interaction with others and the environment' (Nonaka & Toyama 2007, p. 372). Both vision and interaction are thus significant elements of its creation.

In an organisational environment, knowledge creation does not arise in abstraction from current capabilities (Kogut & Zander 1992). Knowledge can only be created from that which is already known (Polanyi 1966; Schumpeter 1934). By evolving in its social context, new knowledge is created (Blumentritt & Johnston 1999; Sharkie 2003; Von Krogh, Nonaka & Aben 2001). Being a human process, both social and individual, based on experience which may involve feelings and belief systems, knowledge develops and contributes to innovation (McDermott 1999; Von Krogh, Ichijo & Nonaka 2000). Despite Jakubik's (2011, p. 382) assertion that 'learning and

knowledge creation are interrelated is a self-evident, commonly shared idea' there appears to be separation between the organisational learning and knowledge creation in the academic literature (Easterby-Smith & Prieto 2008; Vera, Crossan & Apaydin 2011). In particular, how knowledge is created remains unclear, making it difficult to proffer constructive ideas on its management in a collaborative venture. Inkpen (1996, p. 126) suggests 'The creation of organizational knowledge requires the sharing and dissemination of individual experiences'.

4.4.1 Knowledge creation theory development

Generally models that have attempted to explain knowledge creation theoretically have been based in the objectivist perspective of knowledge, for example Nonaka and Konno's (1998) model of Socialization, Externalization, Combination and Internalization (SECI). Describing knowledge creation as a dynamic process in which explicit and tacit knowledge are transformed and exchanged (Nonaka & Konno 1998), a key contribution of the model is its inclusion of tacit knowledge in the knowledge creation process, highlighting its interplay with explicit knowledge (Hoe 2006). The SECI model has been revised several times with the addition of concepts such as ba and shared knowledge creation (Baskerville & Dulipovici 2006; Brännback 2003; Kodama 2005).

Despite being the focus of widespread discussion (Hoe 2006; Pun & Nathai-Balkissoon 2011), the model is infrequently tested empirically. The majority of discussion surrounding the model is conceptual. Lakomski (2004) for example states that 'explicit knowledge is dependent on tacit knowledge' which would make separating the two in the SECI process difficult to achieve to transfer the knowledge.

Further criticisms include Thompson, Jensen and DeTienne's (2009) views that the SECI model, although allowing that some knowledge can be transferred tacitly, does not discuss how information and knowledge differ. Additionally they contend that the focus is on the sender throughout, rather like a transmission model of communication in its infancy. The model does not recognise the role of the receivers in the process. Reihlen and Ringberg's (2006) study of consultancy firms found individual's mental models and tacit knowledge are significant to interpretation.

Other models to explain knowledge creation have generated less widespread academic discussion, but provide further insights into the process. Boisot's (1995) information space for example emphasises the cyclical nature of knowledge creation, acknowledging the interdependency between individual knowledge, the social context and new knowledge. Bergh (2008, p. 60) notes that knowledge once created supports reflective processes, 'the possibility to see alternatives, to interpret and to re-interpret, to increase the knowledge base'. This is a similar conclusion to that offered by Bessant and Francis (1999) when discussing shared learning and the contributions that can be made by different perspectives, shared experimentation and shared experience. These models evidence the overall complexity of the knowledge creation process and how the interdependencies remain unclear. Knowledge creation is a cyclical process, in which the social and physical contexts interact with individuals. Sharing between individuals is necessary; their mental models will affect interpretations of the knowledge created, which can be embedded in dynamic routines.

4.4.1.2 Theoretical development of knowing

Jakubik (2011) suggests that knowledge creation theory is itself in need of a paradigm shift that alters the focus from the transformation of knowledge between tacit and explicit, which brings conceptual difficulties (Gourlay 2006). By better highlighting 'the social, human, interactive, evolutionary, and dynamic nature of knowledge creation' it will be possible to better develop theory (Jakubik 2011, p. 393). Introducing the becoming to know framework, the links between know-what, know-why, know-how and future knowledge are shown in the process of becoming to know. The forms of knowledge know-how, know-why, know-what and know who (or network competence) are identical at the levels of both the individual and the organisation (Baskerville & Dulipovici 2006; Bergh 2008; Kogut & Zander 1993; Lundvall & Johnson 1994). Bergh (2008) contends these are comparable to learning outcomes. Know-how, -why and -what are cognitive outcomes, for example know-how is similar to learning-by-doing and the latter two are more appropriately theoretical and strategic understandings. Know-who is more connected to a social learning outcome through networks for example. By combining these forms of knowledge with know-myself, a psychodynamic form of knowledge exemplified for example by a manager's self-confidence, know-change can be conceptualized (Bergh 2008). However over time know-change can fade if it is not used in practice (Nilsson 2004 in (Bergh 2008). Figure 4.1 shows this framework. In the process of becoming, new knowledge is created, which is then learnt ready for the next step in the ontological and epistemic chain (Jakubik 2011).

Jakubik's (2011) framework acknowledges that people create knowledge in the present time, as a function of the outcomes of exploring and experiencing the

knowledge ecosystem, thinking and sense-making in the specific social, environmental and temporal context, echoing Powell and Swart's (2005, p. 47) views that 'knowledge is constructed through action and is embedded in a historical and systemic context'. Learning and knowing are part of a dynamic process of interactions between people and their environments, of engaging and becoming to know. Knowing exemplifies the practice of knowledge in a context and taking action (Polanyi 1966; Powell & Swart 2005). As knowledge is created there is a change, an outcome; in other words, learning has occurred.

Figure 4.1   Becoming to know framework
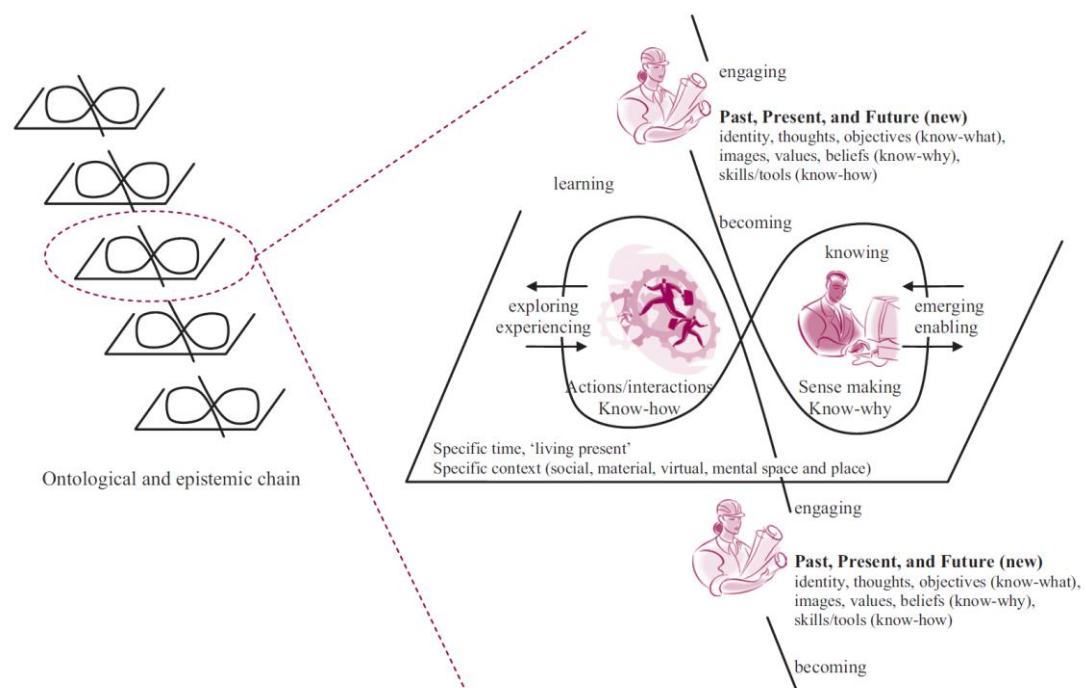
Source: Jakubik (2011, p. 391).

Within a collaborative venture there are critical components that contribute to the knowledge-based organisation (Nonaka, Toyama & Hirata 2008). Jakubik's (2011) model shows the interplay between components that can be found in a collaborative venture. There is an ecosystem of knowledge with multi-layered Ba, created by meetings, interaction and activities between the participating organisations. Each party brings to the collaborative venture their knowledge vision (know-what) and their driving objectives in the form of strategic intent (know-what). Through the processes of collaborating in the black box, practices (know-how), dialogue (sense-making, know-why), Ba as a specific space-time nexus and knowledge assets interact. They are both the input and the output of a knowledge creation process (Jakubik 2011). Applying this model to collaborative ventures may provide insights into the roles of each of the components and highlight managerial implications for practice.

4.4.2 Knowing and collaborative ventures

Within the process of knowing in a collaborative venture translation occurs, a key process in knowledge production (McFarlane 2006). In Figure 4.1, the chain of translation is visible (Latour 1999). Knowledge effects in translation include changes to not only the forms of knowledge but also people, statements, artefacts and places, such as new work routines and refinements to products (Czarniawska & Sevon 1996; Garud & Karnøe 2001; Latour 1994). As knowledge translates, it effectively travels as the result of what actors do with it (McFarlane 2006). Enabling productive translation in collaborative ventures is a key priority to developing the knowledge effects.

Elmholdt (2010, p. 328) suggests that practices of knowledge sharing and creation are better viewed from a situated and embodied perspective, 'seeing knowledge as an enactment inseparable from action, and learning as social participation'. Documents for example then become socially situated artifacts, containing information which can be translated into knowledge. Therein lies a paradox as 'tacit knowledge has great strategic value but it must be codified to exploit that value' according to existing literature (Coff, Coff & Eastvold 2006, p. 452). Knowledge then principally has value when it is enacted (Antonacopoulou & Tsoukas 2002; Swart 2011) as this generates opportunities for knowledge creation. Interaction is critical to innovation and improvements within an organisation (Von Krogh, Nonaka & Aben 2001). Knowledge creation occurs in small groups, with ongoing interaction, providing a stream of new knowledge.

There is a dark side to knowledge creation and management that includes social alienation and opportunistic behaviour (Chua 2009). Additionally ideas that arise in the space may be underused or not recognised as being of value if people cannot see their contribution to their own work tasks and responsibilities (Dougherty 1992; Jelinek & Schoonhaven 1990). Uncertainties of this nature can reduce the value of social interactions in terms of knowledge creation (Bartel & Garud 2009; Chua 2009). Managing both interactions and social interactions in a collaborative venture to facilitate productive outcomes appears necessary both within the collaboration and to disseminate the knowledge acquired into the collaborating organisations.

A key part of the continuous cycle of sharing and creating knowledge is absorbing knowledge. Van Wijk, Jansen and Lyles (2007) indicate that the most prominent

theme in their review on organisational effects of knowledge transfer is the crucial role for absorptive capacity, an organisation's general ability 'to recognise the value of new, external knowledge, assimilate it, and apply it to commercial ends' (Cohen & Levinthal 1990, p. 128). The process of absorption is not explicitly highlighted in Jakubik's (2011) model of knowing and warrants further investigation. Absorptive capacity and organisational learning are the focus of the following section.

4.5   Absorptive capacity and organisational learning

Absorptive capacity has its roots in work related to human learning and cognition (Bower & Hilgard 1981; Lindsay & Norman 1977). The term absorptive capacity, initially created by Kedia and Bhagat (1988) in their investigation of organisational characteristics and international technology transfer, is more commonly associated with seminal works by Cohen and Levinthal (1989, 1990), when extending understanding of the role of cognitive structures and problem-solving skills in an individual's learning and applying it to an organisation (Lane & Lubatkin 1998). Being an overarching concept absorptive capacity is linked to theoretical developments in disciplines such as psychology, economics and sociology, although its roots are in organisational learning (Fiol & Lyles 1985; Levitt & March 1988; Volberda, Foss & Lyles 2010), being central to studies of learning, dynamic capabilities and innovation (Volberda, Foss & Lyles 2010). A focus on R&D contexts has tended to drive attention towards more tangible outcomes of absorptive capacity, such as patents and innovations, at the expense of increases in say process knowledge (Bogers & Lhuillery 2011; Flatten et al. 2011; Lane, Koka & Pathak 2006). More recently the scope is broadening, for instance Lee, Liang and Liu (2010)

added educational background of employees to R&D expenditure as an indicator of absorptive capacity. Zahra and George (2002, p. 186) define absorptive capacity as 'a set of organizational routines and processes by which firms acquire, assimilate, transform, and exploit knowledge to produce a dynamic organizational capability'. Routines and processes enable the organisation to develop the dynamic organisational capability to absorb, assimilate, transform and exploit knowledge, the four key processes of absorptive capacity (Zahra & George 2002). Following an extensive review of the literature, Flatten, Engelen, Zahra and Brettel (2011) recently developed, empirically tested and validated a multidimensional measure of absorptive capacity, based upon these four dimensions. Given Flatten et al.'s (2011) empirical validation, Zahra and George's (2002) definition is adopted for this study.

Viewing absorptive capacity as a dynamic capability is congruent with earlier research that had found motivation, causal ambiguity and relationships significant (Dyer & Singh 1998; Szulanski 1996). Such a viewpoint accentuates that decision making, via managerial strategy and actions, can affect absorptive capacity (Andersén & Kask 2012). Levels of realised absorptive capacity will be explained by managerial actions (Zollo & Winter 2002), in turn affected by managerial cognitive features and mindsets (Stubbart 1989), notions of bounded rationality (Simon 1982) and managerial limitations (Penrose 1959). What managers pay attention to and act on is based on the organisation's rules, resources and relationships (Ocasio 1997). Thus their attention, guided by their strategic intent, influences the development of absorptive capacity within the organisation. Consequently the strategic intent, activities and mindsets of senior managers in a collaborative venture will impact the knowledge transfer and creation outcomes.

4.5.1 Critical aspects of absorptive capacity in collaborative ventures

There are several critical aspects of absorptive capacity that affect its development, including how it accumulates and the total amount of it. Senior managers can influence these to achieve the organisation's strategic intent in collaborative ventures.

4.5.1.1 Developing absorptive capacity

Firstly absorptive capacity develops cumulatively (Cohen & Levinthal 1990; Lane & Lubatkin 1998; Vinding 2004), in an expanding spiral with learning (Van Den Bosch, Volberda & De Boer 1999), being reliant on the absorptive capacity of an organisation's individual members. For an individual, absorptive capacity is personal knowledge that 'is embedded in a system of largely tacit, routinized mental categories' (Nooteboom 2004, p. 12). People absorb knowledge more readily with an existing, similar foundation for example from training or experience (Flatten et al. 2011; Reagans & McEvily 2003; Roberts et al. 2012), although being exposed to external knowledge does not ensure it will be absorbed (Pennings & Harianto 1992). Lane and Lubatkin (1998) suggest that the knowledge embedded in specific knowledge-processing systems is critical. In the unfamiliar circumstance of a collaborative venture prior experience, similar work practices and training can all be managed to improve knowledge outcomes.

Further people's cognition is critical, particularly their 'individual and shared mental models' which 'provide insights into what new knowledge is recognized, how it is transformed and combined, and how it is applied' (Lane, Koka & Pathak 2006, p.

857). Transformation occurs by the processes involved in relating existing and new knowledge together (Fichman & Kemerer 1997; Lane, Koka & Pathak 2006). New knowledge can thus be applied to replenish the existing knowledge base (Van Den Bosch, Volberda & De Boer 1999), reconfigure existing capabilities (Pavlou & El Sawy 2006) or create radical innovations (Lane, Koka & Pathak 2006). Unlike the organisation's knowledge base, which is a stock, absorptive capacity is continually evolving with this accumulation process (Van Den Bosch, Volberda & De Boer 1999). The need for processing knowledge internally as part of the assimilation and application process is an integral part of absorptive capacity (Rothaermel & Alexandre 2009; Zahra & George 2002). However the prior related knowledge of the individuals and their ability to absorb knowledge are foundational in this process in an organisation. Senior managers can strategically improve the knowledge base by ensuring training and education of staff are linked to key areas of interest for innovation and sustainable growth, such training in collaboration capability.

Prior research indicates higher levels of absorptive capacity are associated with positive benefits such as successful spanning of organisational boundaries, managing communications with partners more effectively and higher levels of internal technological competence (Nicholls-Nixon & Woo 2003; Rothaermel & Hill 2005; Tushman 1977; Tushman & Katz 1980). However Berghman, Matthyssens and Vandenbempt (2012) find support for a flow approach to absorptive capacity, rather than a stock (Escribano, Fosfuri & Tribo 2009), reinforcing its dynamic nature and need for strategic direction to guide its development as part of strategy implementation.

The proactive agency of individuals who span boundaries with other organisations contributes to the accumulation of absorptive capacity (Jones 2006). Such gatekeepers can reduce the differences in language and cognitive orientation between different systems (Tushman & Katz 1980). Being able to span different organisational boundaries, for instance in a collaboration, enables novel linkages and combinations from different types of knowledge that often underpins innovation (Grant 1996; Kogut & Zander 1992; Rothaermel & Alexandre 2009; Simon 1985). Higher levels of absorptive capacity tend to result in better sensing and responding by organisations to new knowledge and its potential for innovation in conjunction with existing internal knowledge (Cohen & Levinthal 1990; Rothaermel & Alexandre 2009). The unique application of external knowledge by individuals who scan the environment and bring such knowledge into an organisation creates value. The organisation's knowledge management processes then affect its sharing and transfer within the organisation (Jones 2006; Lane, Koka & Pathak 2006). Senior managers involved in collaborative ventures bring external knowledge into the organisation and need conduits for its subsequent distribution.

Thirdly being recursive, prior related knowledge and investment in say R&D enables the further accumulation of absorptive capacity within the organisation. The potential to learn more grows from these related foundations (Ahuja 2000; Lane & Lubatkin 1998; Lyles & Salk 1996; Mowery, Oxley & Silverman 1996; Powell, Koput & Smith-Doerr 1996; Shane & Venkataraman 2000; Tsai 2001). Vinding (2004) indicates that a prior level of knowledge in particular areas of expertise enables new knowledge to be assimilated more readily. The capability to read, interpret and exploit signals in the pertinent marketplace is strong. Absorptive capacity is

diminished by unlearning, the process that rejects obsolete and misleading knowledge (Cegarra-Navarro & Dewhurst 2006; de Holan, Phillips & Lawrence 2004; Hedberg 1981; Nystrom & Starbuck 1984). The cyclical processes of learning and unlearning conceptually link organisational learning and absorptive capacity. Absorptive capacity and organisational learning can be viewed as being either antecedents to each other (Reagans & McEvily 2003; Schilling 2002; Szulanski 1996) or recursive (Cohen & Levinthal 1990; Hotho, Becker-Ritterspach & Saka-Helmhout 2012; Lane & Lubatkin 1998; Sun & Anderson 2010; Tsai 2002). Taking the latter, cyclical view in a collaborative venture an organisation would acquire and utilise external knowledge as an antecedent to individual organisational learning that generates change in absorptive capacity through 'socio-psychological learning processes' (Sun & Anderson 2010, p. 141) which vary with organisational contexts (Lane, Koka & Pathak 2006). From a management perspective then, absorptive capacity may be both accumulating and/or reducing at the organisational level, but is dependent on social learning processes at the individual level; it has a recursive relationship with organisational learning (Hotho, Becker-Ritterspach & Saka-Helmhout 2012; Lane & Lubatkin 1998; Sun & Anderson 2010). The role of individual actors and the social context in this process remains unclear (Hotho, Becker-Ritterspach & Saka-Helmhout 2012). Increasing the level of absorptive capacity through education and training may assist the achievement of strategic intent.

From the above key aspects it can be seen that absorptive capacity is a relative, multilevel concept, constituted by both individuals and the organisation that is brought into a collaborative venture. Lane and Lubatkin (1998) contend that the

capacity to learn from other organisations is not equal, that within alliances and collaborations any one organisation's absorptive capacity is different to another's. The individuals in each organisation, having different life paths and experiences, are cognitively distant which may affect knowledge flows, an organisation's knowledge base, the ability to learn from other organisations, recognise opportunity or understand novelty (Bogers & Lhuillery 2011; Lane, Koka & Pathak 2006; Lane & Lubatkin 1998; Nooteboom et al. 2007).

Absorptive capacity allows effective spanning of organisational boundaries and is a key concept connecting knowledge creation, innovation and collaboration. Each organisation has unique knowledge-processing variables that it brings to a collaborative venture, consequently there will be different levels of absorptive capacity operating simultaneously (Lane & Lubatkin 1998; Lane, Salk & Lyles 2001). Rothaermel and Alexandre (2009, p. 774) indicate that 'absorptive capacity is the fulcrum that allows firms to leverage ambidexterity'. Critically they indicate that being able to balance inward- and outward-looking components of absorptive capacity enables the integration of knowledge from diverse sources, a key organisational capability (Grant 1996). Rothaermel and Alexandre (2009) find that there is a non-linearly positive relationship between an organisation's absorptive capacity and its innovative output and that it has a positive moderating effect on the ambidexterity-performance relationship. Moreover knowledge accumulation from external sources is constrained by an organisation's existing structures and processes which also affects the feasibility of strategies (Lane, Koka & Pathak 2006). During a collaborative venture, each organisation involved will thus have different learning outcomes; these outcomes may be influenced by their strategic intent.

4.5.1.2 Organisational learning and collaborative ventures

With interactive learning occurring in collaboration (Lane & Lubatkin 1998) social interactions are clearly important (Hotho, Becker-Ritterspach & Saka-Helmhout 2012). In MNC research, where the transfer of knowledge between subsidiaries has generated keen empirical interest in absorptive capacity and the role of social interactions (for example Dhanaraj et al. (Dhanaraj et al. 2004; Lane & Lubatkin 1998; Reagans & McEvily 2003; Tsai 2002)) research into the effects of internal social interaction has been limited (Hotho, Becker-Ritterspach & Saka-Helmhout 2012). Hotho, Becker-Ritterspach and Saka-Helmhout (2012) suggest that researchers have often overlooked the central organisational processes that facilitate knowledge acquisition, transformation and application, including both the role of individual actors and how new knowledge is assimilated (Volberda, Foss & Lyles 2010). Hotho, Becker-Ritterspach and Saka-Helmhout (2012) studied knowledge transfer and creation in the chemical industry by investigating two subsidiaries of a Dutch MNE during the introduction of a continuous improvement programme. Despite similarities between the German and the English subsidiaries in terms of size, field of business, knowledge bases and motivations, there were noticeable differences in the learning outcomes from the programme. This suggests that social interaction is a key requirement for organisational absorptive capacity as it links the micro- and macro-levels within organisations (Hotho, Becker-Ritterspach & Saka-Helmhout 2012). Encouraging interactivity between senior managers and the organisation will enable learning from knowledge created in collaborative ventures to be captured as part of collaborative ventures. However differences in organisational conditions may impact organisational knowledge processes via the

social structure (Gooderham, Minbaeva & Pedersen 2011; Hotho, Becker-Ritterspach & Saka-Helmhout 2012).

A key organisational process is strategy implementation. Hotho, Becker-Ritterspach and Saka-Helmhout (2012) note in their aforementioned case study that senior managers created the strategic vision for the continuous improvement program. The strategic vision guided the social behaviours of the employees, including middle managers and supervisors. In the more successful German subsidiary, reframing and translating the strategic vision to attract employees' attention to create association contributed to better learning outcomes. The inherent complexity of management processes in a collaborative venture affects knowledge transfer. A collaborative venture is a complex system; unfortunately 'the behaviour of a complex system cannot be simply inferred from the behaviour of its components' (Whitty & Maylor 2009, p. 305). Lane, Koka and Pathak (2006) indicate that the link of absorptive capacity to strategy measures is a necessary avenue of future research to better understand interrelationships between strategy and absorptive capacity. Similarly Tang (2011, p. 270) contends that 'research is silent on the connections and relationships between disseminative capacity and absorptive capacity'. For the strategic management of knowledge creation and transfer in a collaborative venture component parts, such as absorptive capacity, strategic intent and disseminative ability, need to be considered simultaneously. This thesis is investigating these interdependencies.

4.6 Linking organisational learning, knowledge effects and strategic direction

There is strong support for the benefits of organisational learning to competitive advantage (Kaleka & Berthon 2006; McGuinness & Morgan 2005) and diverse aspects of business such as organisational performance (Azadegan & Dooley 2010), market orientation and relationship marketing (Santos-Vijande et al. 2005; Stein & Smith 2009), the strategic supply process (Hult, Ketchen & Slater 2004) and innovation (Akgun, Lynn & Yilmaz 2006; Santos-Vijande, Lopez-Sanchez & Trespalacios 2012). Moreover organisational learning is regarded as a dynamic capability that enables organisations to adapt (Madhavaram & Hunt 2008; Santos-Vijande, Lopez-Sanchez & Trespalacios 2012).

4.6.1 Managing in practice for knowledge effects in collaborative ventures

Van de Ven and Johnson (2006) state that a key issue in knowledge transfer and translation is that the literature has been framed from three different perspectives, which affect the speed with which findings are transferred between these domains. These perspectives are that of a knowledge transfer problem, secondly as two separate ontologies and epistemologies and thirdly as a knowledge production problem, with the latter the outcome of the first two perspectives. Taken in combination it appears difficult to both generate applied uses and advance fundamental understanding simultaneously by research (van de Ven & Johnson 2006). The forms of knowledge generated by the practitioner and the academic are both partial and incomplete as they are perspectival, involving inherent bias and with unseen aspects (Poggi 1965; van de Ven & Johnson 2006). Lakomski (2004, p. S92)

advocates that a realistic approach is research that focuses 'on people's practical knowledge, constantly created while interacting with others and engaged in the solving of organizational tasks'. This thesis is thus investigating knowledge creation in the practice of collaborative ventures.

Regardless of whether an academic or a practitioner, it is apparent that managing to capture and transfer emerging knowledge within the hybrid communities that constitute the knowledge ecosystem of a collaborative venture is an essential activity, albeit difficult (Brown & Duguid 1998). Vinding (2004) finds that three indicators of human capital improve innovative ability, namely share of highly educated employees, application of HRM practices and development of closer relationships, with both vertical actors and knowledge institutions. However he finds that work experience of managers did not have a significant effect.

In contrast Beardsley, Johnson and Manyika (2006) suggest that to ensure that the tacit activities of managers' complex problem solving are effective requires the fostering and development of experience, ability to understand multi-faceted information and its implications, judgements and creativity. Such abilities are required to develop inimitable talent-based competitive advantage, drawing on diverse forms of knowledge from different sources, including co-workers, customers and suppliers. To facilitate the development of these skills and abilities organisational barriers, such as silo mentality, have to be removed, trust enabled (Kumar 1996; Levin et al. 2004; Mentzer, Foggin & Golicic 2000), employee self-confidence engendered through HRM practices (Prieto & Pilar Pérez Santana 2012), and tools for decision making and communication provided, such as story-telling

(Boal & Schultz 2007; Snowden 2004; Swap et al. 2004), coaching (Bond & Seneque 2013; Ellinger & Bostrom 2002; Swart & Harcup 2013) and reflection (Zundel 2013). Creating conditions that allow emergence of innovation and allocating resources as it emerges and providing strategic direction is necessary, to guide the development of these initiatives.

The involvement of senior managers is crucial (Andraski 1998). Senior managers can enable knowledge creation and transfer by establishing complex networks, personal relationships and the common backgrounds that will enable the effective evaluation and propagation of emerging knowledge (Brown & Duguid 1998). Additionally the routines and procedures in place can be developed to recognise any emerging opportunities (Feldman & Pentland 2003). As each organisation involved in collaboration has separate and different 'structures, incentives and management' to 'generate innovation and build their knowledge assets' (Teece 1998, p. 62) how they individually and jointly create and recognise value from new knowledge creation varies. Critical factors include a translator, someone able to 'frame the interests of one community in terms of another community's interests' (Brown & Duguid 1998, p. 103), absorptive capacity, context and business processes (Brown & Duguid 1998). Another critical aspect is the ability to sense, respond and learn (Butner 2007; Sinkula 1994). Lusch, Vargo and Tanniru (2010) advocate that adopting a service-centered frame of reference can be developed to sense changes in customers and the environment and learn from the changes. Their suggestions to develop this mental model include focus on serving rather than creating goods, more authentic conversation and dialogue, shifting to relational exchanges rather than transactional and recognising the strategic advantage in symmetric rather than asymmetric

information. Reflective conversations that support these relational exchanges 'are crucial to co-operative collaboration across the boundaries of a company' (Gratton 2006, p.2). Citing the different types of conversation that were used during the pre-acquisition phase when OgilivyOne acquired NoHo Digital, Gratton believes that a portfolio of conversation styles, including intimate and more rational, analytical conversations were utilised. The former built a deep trusting relationship between senior managers and the latter, the disciplined debate, was used for obvious commercial reasons throughout the acquisition (Gratton 2006). Creating time and space for conversations to occur, with new, relevant information feeding into the process so that the conversations can develop is vital (Gratton 2006). By developing these skills and providing direction on strategic intent, senior managers can enable the capture of the mutual benefits for their organisations in collaborative ventures. Of note is that all of these suggestions have a common core, the need for senior managers to both recognise their strategic value to knowledge processes and to provide direction. Strategic intent is thus a common factor.

More recently Berghman, Matthyssens and Vandenbempt (2012) consolidate some of the connections between strategy, absorptive capacity and learning by exploring deliberate learning mechanisms (Zollo 2009). Targeting the different dimensions of absorptive capacity, namely recognition, assimilation and exploitation, with deliberate learning mechanisms, Berghman, Matthyssens and Vandenbempt (2012) found that mechanisms for intra- and inter-organisational learning are not isolated, there are interconnections (Holmqvist 2004). These findings support the notion that different ways of learning may interact.

Of interest is the paucity of research that links organisational learning with strategy (Kaleka & Berthon 2006; McGuinness & Morgan 2005; Paisittanand, Digman & Lee 2007; Santos-Vijande, Lopez-Sanchez & Trespalacios 2012; Wu & Cavusgil 2006). Organisational learning links the business ecosystem, strategy alignment, recognition of opportunities and innovation (Beer et al. 2005; Lumpkin & Lichtenstein 2005), particularly through an organisation's capacity to adapt (Madhavaram & Hunt 2008; Santos-Vijande, Lopez-Sanchez & Trespalacios 2012) and its memory (Cross et al. 2004). There is an implied strategic dimension (Crossan, Lane & White 1999), being represented as the emergence of shared concepts, which embrace new ways of thinking and behaving that assist the organisation to achieve its goals. Strategy implementation, with few widely accepted definitions, is an interpersonal process amongst co-workers in an organisation (Noble 1999). Noble (1999) reviews several current definitions which focus on either implementation as an activity to control and monitor, or an activity to executing the strategic plan or detailed planning to operationalise the strategic plan. The emergent nature of strategy is thus overlooked. Noble (1999, p. 120) suggests that implementation can be better defined as 'the communication, interpretation, adoption, and enactment of strategic plans'. Santos-Vijande, Lopez-Sanchez and Trespalacios (2012) argue that there are few links with strategy implementation and organisational learning, concurring with Paisittanand, Digman and Lee (2007) who suggest that there are few empirical studies investigating relationships between strategy implementation and organisational knowledge. In the dynamic knowledge economy, traditional strategy implementation processes need to adapt (Paisittanand, Digman & Lee 2007). All activities within an organisation are impacted by strategy implementation, which is little researched (Beers 1996; Noble 1999; Walker & Ruekert 1987). Given that 'Successful

organizational synthesis of knowledge requires discovering knowledge as it emerges in practice' (Brown & Duguid 1998, p. 100), recognising different levels and kinds of knowledge in organisations affects the strategic management of knowledge flows (Sanchez 1996). Of note is that Paisittanand, Digman and Lee (2007) comment linkages between strategy implementation and leveraging the capability to create new knowledge from existing knowledge are few, despite the potential for interactions and influences between them. Moreover Al-Laham (2011) indicates that interaction effects between stocks and flows of knowledge and absorptive capacity need further investigation. Being complex phenomena, there is a need for 'applying multimethods and mixed research teams with multidisciplinary knowledge to achieve multiple perspectives' (Jakubik 2011, p. 398). Dierkes, Berthoin Antal, Child and Nonaka (2001) suggest that an emerging challenge in knowledge management research includes the role of learning as strategic intent, to which this study seeks to contribute.

4.7   Summary

Knowledge, knowledge transfer and knowledge creation are inextricably linked through interactivity. Knowledge effects arise when interactions occur between people, routines and the knowledge artefacts. These knowledge effects enable new knowledge to be created which can be utilised for competitive advantage in the knowledge economy. Knowledge is a dynamic, evolving resource, which cannot be separated from practice due to the tacit component. Considering knowledge as knowing better exemplifies the practice of knowledge as being in a context and action occurring.

Within a collaborative venture, regardless of the purpose for collaborating, there will be knowledge effects that enable knowledge creation to occur. These occur in situ so that the context cannot be removed from the process. A significant element of the context is the absorptive capacity of an organisation. Both absorptive capacity and knowledge effects are dynamic, contributing to the dynamic capability of the organisation through becoming to know. For maximising strategic benefits of absorptive capacity and knowledge effects they are best managed as part of the strategy implementation process.

A major issue associated with the key concepts discussed in this chapter has been their lack of research cohesion despite some obvious links and the uneven developments of aspects of each. This is even more noticeable when looking at the corollary of knowledge creation and transfer, namely organisational learning. Such lack of research cohesion adds complexity to understanding the underlying issues to enable effective strategic management practices. What is of interest to this study is how senior managers affect the nature of the interactions and the transformative process through strategic intent, affecting dominant logic and knowledge creation outcomes in collaborative ventures. The following chapter introduces the research methodology chosen to investigate these complex relationships and practices.

Chapter 5 Research Methodology and Design

5.1   Introduction

The preceding literature review identified the complex processes involved in knowledge creation and transfer in collaborations. These processes are highly interactive and occur in a dynamic environment in which an organisation's strategic intent provides it with direction. This chapter details the research methodology and philosophy utilised in this study to investigate the role of strategic intent in knowledge creation and transfer in collaborations. The chapter continues with the information on the mixed methods approach adopted.

The mixed methods approach is chosen to enable the investigation of concepts central to this thesis. Senior managers are interviewed by telephone to ascertain how they apply their organisation's strategic intent to the practice of collaborating. Embedded in the interviews are questions that enable quantitative data to be collected in this exploratory research study. The chapter includes information on key elements of the data collection method employed. It concludes with detail of the procedures involved in preparing, pre-testing and administering the survey instrument designed for the telephone interviews. Additionally error-control processes, reliability, validity and generalisability are discussed.

5.2   Research methodology

The research methodological strategy is the logic underpinning the research study as it attempts to answer the research questions, at the same time as anticipating the process of data analysis (Mason 2002). Research methodology refers to the overall approach taken, the theoretical base of the researcher and the method of data

collection and analysis (Hussey & Hussey 1997; Ketchen, Boyd & Bergh 2008; Mason 2002). The research philosophy of the social construction of reality underpins the strategies used in this study's methodology including all aspects of the research process, such as design, data collection and analytical techniques.

5.2.1 Research philosophy

The research philosophy underpinning this thesis is derived from an ontological perspective of interpretivism. There are multiple realities and each person's reality is an output of interactions in social contexts. The social interactions and experiences enable meanings and understandings to be developed. Interpretivism is looking for understanding and is associated with processes (Berger & Luckmann 1967; Eriksson & Kovalainen 2008; Holstein & Gubrium 2011). Reality is constituted in human interactions and their output, such as conversations and text (Krippendorff 2013). The research occurs as a dialogue to create a more informed understanding of the social world (Deetz 2009). In this ontology, it is possible to objectively understand the subjective interpretation of the actors' activities. The researcher is effectively a disinterested observer (Hudson & Ozanne 1988). For instance the knowledge and social interaction of an organisation's senior managers are central to the development of its strategic intent and absorptive capacity. Their interpretations, views and decisions in their daily practices relating to collaborations are a critical part of this exploratory study. Retaining the human element is critical, so that actors' interpretations of their experiences are not lost, a major risk in positivist, scientific approaches (Easterby-Smith & Lyles 2011; Rubin & Rubin 2005`).

The research has been undertaken from a social science perspective (Creswell plano2011. The approach draws on diverse literature and associated theoretical foundations relating to strategic intent, collaboration and knowledge management. The literature review has been conducted broadly at the intersection of these theoretical foundations, drawing on multi-theoretical foundations from the general management literature. These include strategic management, relationship management and knowledge management. For example, currently in the field of strategic management advances tend to focus on the interchanges between competing theories to understand phenomenon. Such developments in the domain of strategic management have received significant contributions from methodological structure (Ketchen, Boyd & Bergh 2008). Throughout the thesis knowledge, including its creation, transfer and management, is treated as a flow (Venkatraman & Tanriverdi 2005).

There are a wide range of potential theoretical approaches and paradigms involved in studying strategy (Deetz 2009; Kuhn 1996). Senior managers' activities on a daily basis are central to the research questions under investigation, which are explored with a multi-theoretical approach. Underpinning the multi-theoretical approach is an evolutionary and ecological theoretical perspective. Since seminal contributions by Nelson and Winter (Nelson & Winter 1982) and Hannan and Freeman (1977), the interest in this approach has grown in research related to organisations (Lewin & Volberda 2011; Lovas & Ghoshal 2000). The focus of thesis is intraorganisational and organisational evolutionary and ecological processes. By highlighting the role of strategic intent, developing a model of knowledge creation and transfer as guided co-evolution, this thesis aims to contribute to this approach.

5.2.2   Mixed methods

With more calls for greater triangulation, mixed methods studies are becoming more common (Bryman 2008; Creswell 2009; Jick 1979; Molina-Azorín 2011). Mixed methods research studies are utilised in diverse disciplines, being widely accepted as a valid methodological choice and have their own dedicated journals and textbooks (Bergman 2008; Cameron & Molina-Azorin 2011; Creswell & Plano Clark 2011; Morgan 1998; Tashakkori & Teddlie 2003). Understanding what constitutes mixed methods research continues to evolve over recent years. Greene, Caracelli and Graham (1989) indicate mixed methods collects both words and numbers. Creswell and Plano Clark (2011, p. 5) elaborate further, suggesting that it is 'a research design with philosophical assumptions as well as methods of inquiry'. Johnson and Onwuegbuzie (2004) point out that it also includes language and concepts.

Mixed methods research is appropriate for research questions that focus on processes, outcomes and understanding group and individual experiences in situ such as the research in this thesis (Creswell 2009; Johnson & Onwuegbuzie 2006; Lincoln & Guba 1985). The social location of organisational activities for instance places codetermination of outcomes as a central element under investigation (Deetz 2009) and description of phenomena as situated and embedded (Johnson & Onwuegbuzie 2006). By identifying object distinctions, it emphasises interpretive approaches to knowledge, recognising that meaning emerges through interaction and is not standardised (Rubin & Rubin 2005). As such, it is well suited to research related to services and the service product (Gilmore & Carson 1996), such as the Australian logistics industry.

The qualitative research approach in mixed methods aids this thesis in its interpretation and exploration of senior managers' practices. There is a focus on the human element, exploring the activities and practices of the senior managers. Qualitative research has a core commitment to interpret data from the respondents' perspective, enabling their practices to be clearly viewed (Gibbs & Flick 2007). By concurrently embedding quantitative questions for explanation to enrich the interpretations and understanding of the qualitative findings, the study can be categorised as mixed methods (Johnson & Onwuegbuzie 2006; Johnson, Onwuegbuzie & Turner 2007; Morse 1991; Tashakkori & Teddlie 2003), with one, simultaneous, data collection phase (Creswell 2009; Morse 1991).

Organisational research nowadays displays a 'paradigm soup' incorporating innovative methodologies with a range of epistemological orientations, including positivist, feminist and interpretative (Buchanan & Bryman 2009, p. 4). However there is ongoing debate regarding the appropriateness of different approaches to social research (Silverman 2006; Teddlie & Tashakkori 2010). As the boundaries of organisational research are being widened nowadays, multi-paradigmatic approaches to data collection are becoming more the norm (Buchanan & Bryman 2009).

Historically in the strategic management field for instance quantitative methods have tended to be dominant (Molina-Azorin 2009). In contrast, marketing research has commonly employed qualitative data analysis (Rust & Cooil 1994). Gummesson (2003) comments with regard to marketing knowledge and practice, many organisations transact in a complex, ambiguous world with continuous change the norm, reality is complex. If researchers utilise a limited range of research techniques,

the results may not effectively capture practice. In effect both qualitative and quantitative data is interpreted (Gummesson 2003). Gummesson (2003) suggests that this ongoing paradigm debate is a red herring, detracting from the more important issues of access and validity. Increasingly lower response rates to quantitative surveys are not giving 'proper access to reality' and incomplete, distorted glimpses of complex and ambiguous issues are being provided (Gummesson 2003).

Importantly, as Jick (1979) suggests, allowing multiple viewpoints to be presented as in mixed methods research, improves the accuracy of the researcher's judgement about the phenomenon under investigation. By gathering data from different sources and by different methods, any convergence of explanations suggests a truer picture is being developed (Creswell & Plano Clark 2011; Gillham 2000a; Morgan 1998). Such approaches enable thick description to be developed (Geertz 1973; Jick 1979) and facilitate convergence (Morgan 1998), adding realism to the findings and thus increasing validity (Creswell 2009). Mixed methods enables the researcher to both interpret what occurs and investigate if there is some statistical explanation that may guide that interpretation, such as the size of organisation in terms of its employees (Creswell & Plano Clark 2011).

Importantly for this study, mixed methods is perceived as 'an extension of every day sense making' and follows a similar notion as that characterised by various sources of evidence (Teddlie & Tashakkori 2011, p. 296). Prior theory is at an intermediate stage, with several concepts relating to this study remaining tentative. With diverse prior knowledge available, utilising mixed methods provides methodological fit for this exploratory study (Edmondson & McManus 2007). The qualitative research

component enables the voice of the respondents and emergent themes in the collaborative ventures to be observed (Gilmore & Carson 1996; Van Maanen 1979), without the initial restriction of categorisation required in quantitative studies (Johnson & Onwuegbuzie 2006). However the quantitative component assists with completeness and enhances the qualitative findings. Quantitative research removes any bias from subjective interpretation of the data (Creswell & Plano Clark 2011). Further differences between groups of respondents based on age or experience for example can be identified. The benefits of the statistical tools employed are combined with the voice of the respondents. The research design adopted for this study follows.

5.3   Research design

The research design is a key step in the research process, forming 'an integral component of a wider, iterative, and coherent research system' (Buchanan & Bryman 2009, p. 2). Tedlie and Tashakkori (2006) indicate there is a logical process that researchers can follow to aid selection of the best design for their project. Commencing with the research questions, and studying a range of design options, key criteria for the study can be considered before developing the final design. Figure 5.1 shows the process followed.

Figure 5.1   The research study's design process

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┌─────────────────┐          ┌─────────────────────┐
│ Literature      │          │ Operationalisation of│
│ review      to  │      ┌──▶│ the key concepts    │──┐
│ establish   key │      │   └─────────────────────┘  │      ┌──────────┐
│ concepts:       │      │            │  ▲             │      │ Research │
│                 │──────┤            ▼  │             ├─────▶│ study    │
│ -Knowledge      │      │   ┌─────────────────────┐  │      │ designed │
│ creation        │      │   │ Development of the  │  │      └──────────┘
│                 │      │   │ proposed      model │  │
│ -Knowledge      │      └──▶│ showing relationships│─┘
│ transfer        │          │ between constructs  │
│                 │          └─────────────────────┘
│ -Collaboration  │
│                 │
│ -Strategic      │
│ intent          │
│                 │
│ -Absorptive     │
│ capacity        │
└─────────────────┘
```
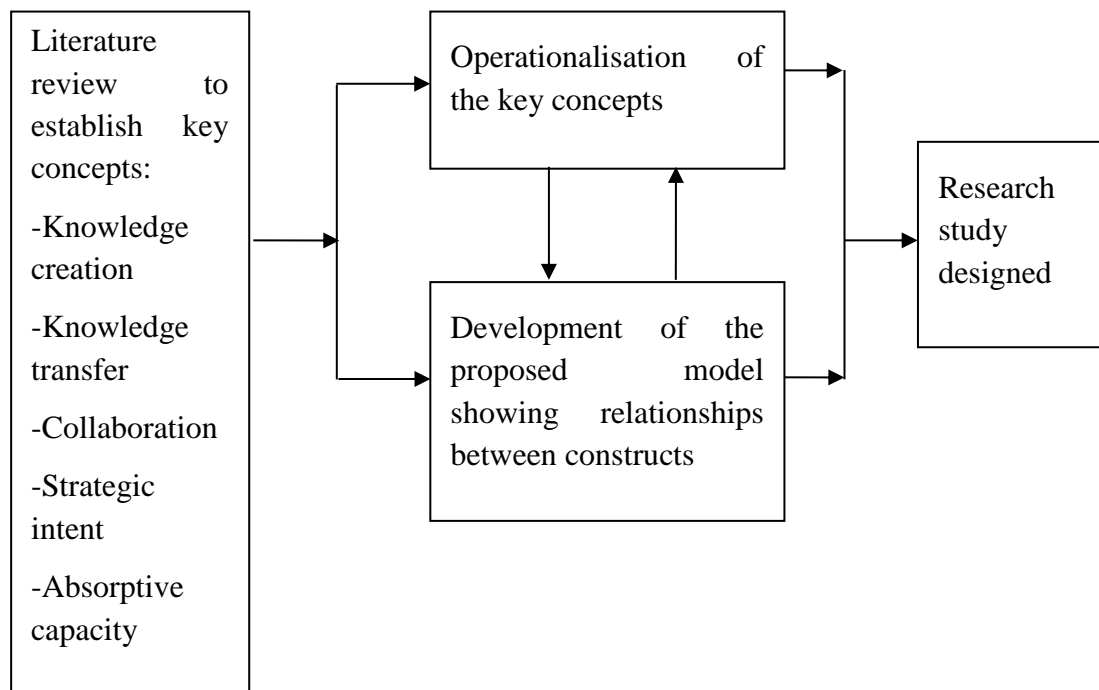
5.3.1 Research questions

As indicated in Chapter One, the primary objective of this research is to investigate the contribution of strategic intent to knowledge creation and transfer in collaborations. To achieve this aim, the focus is placed on the Primary Research Question (PRQ):

> *PRQ: Does strategic intent contribute to knowledge creation and transfer in collaborations?*

To assist in investigating the PRQ, three Secondary Research Questions (SRQ) have been developed. These are:

SRQ1: Is an organisation's strategic intent considered when forming collaborations?

SRQ2: What are the potential strategic benefits of forming collaborations?

SRQ3: Is absorptive capacity strategically developed to enhance knowledge transfer and creation in collaborations?

Following the literature review in the preceding chapters, the researcher has developed a conceptual framework underpinning these questions which is introduced in the next section.

5.3.2   Conceptual framework

Phenomena are measured by researchers on the basis of their conceptualisations (Gómez et al. 1999). Concepts are the mental images, a 'family of conceptions' that form about a phenomenon (Kaplan 1964, p. 49). Conceptions summarise observations and experiences that seem to be related and real to the observer. Concepts are thus constructs that people create and are neither directly nor indirectly observable (Babbie 2011; Rubin & Rubin 2005). The process of conceptualisation allows people to specify what they mean by developing indicators of the phenomenon that is conceptualised (Gómez et al. 1999). Specifying indicators enables the grouping of indicators into dimensions that can be measured (Babbie 2011). Following the literature review each concept is developed, with nominal definitions being developed for this research study. Appendix 4.1 contains the table of the concepts, their operationalisations and measurable indicators. The framework

of the relationships between these concepts was developed from the operationalised concepts to facilitate the research design process.

The literature review enabled analysis of the components of the domain which have then been synthesised into the conceptual framework. Although recognising that creating a framework risks omitting details, it nonetheless facilitates abstraction and problem-solving (Gómez et al. 1999). Once developed, the testing in the real-world is undertaken to validate that it adequately explains observed behaviour. The conceptual framework is given below in Figure 5.2. The conceptual framework is developed from the literature reviewed in the previous chapters. It illustrates that interorganisational interactions occur in collaborations in the business ecosystem. The interactions lead to knowing, which encompasses both knowledge creation and transfer. The collaborating organisations then assimilate that knowing through their absorptive capacity. In the process of being assimilated, the knowing is both influenced by, and influences, the organisation's strategic intent. The organisation evolves as the knowing assimilates and it then influences the collaborative venture in a dynamic cycle. To explore this dynamic capability further, the research design process was then implemented, commencing with decisions regarding the sample. The sample is introduced in the next section.

Figure 5.2   Conceptual framework of the thesis
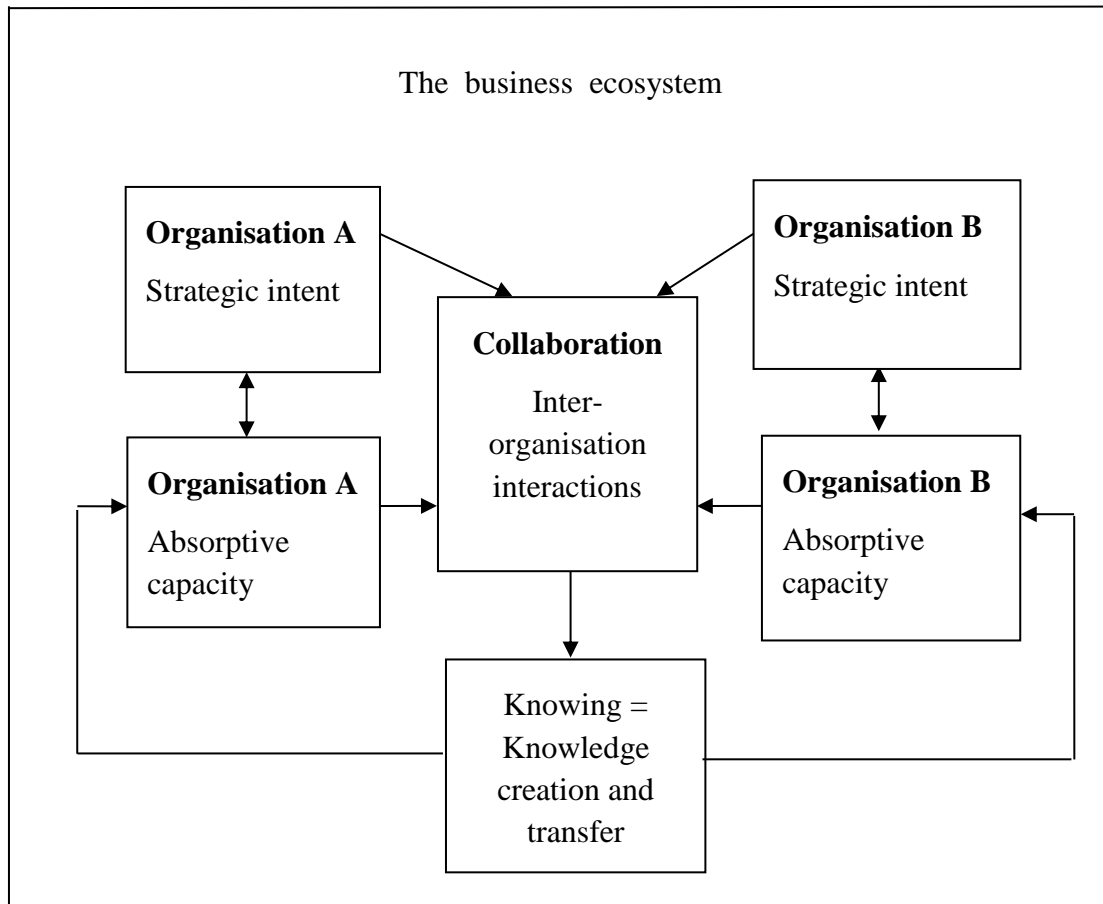
5.4   Research sample

Chapter 4 highlighted that understandings of knowledge processes require an
increasing focus on interorganisational relationships and their routines and practices
(Howells 2010). In service firms innovation is more oriented towards external
sources of knowledge, such as interorganisational collaboration and customers
(Howells 2010; Mansury & Love 2008). Innovation often arises from service
practice as opportunities are recognised *a posteriori* (Gallouj & Djellal 2010; Sundbo
1996; Toivonen 2010). Moreover services tend to be integrative of performances and
processes, having an interactive nature by definition (Gilmore & Carson 1996) and

being thus suitable for the research methodology proposed in this study's research design. Consequently this research study will draw its sample from service organisations.

The research will therefore contribute to the increasing recognition of the importance of collaboration for knowledge creation in the innovation management literature (for example Lundvall (1992); Chesbrough et al. (2006); Lundvall (Lundvall 2004) and Vega-Jurado et al. (2009)). Collaboration enables access to distributed knowledge and innovation amongst other economic actors (Chesbrough 2003; Chesbrough, Vanhaverbeke & West 2006; Trigo & Vence 2012). With the increasing recognition that the services sector is fundamental to the performance of national economies (Gallouj & Djellal 2010), interest in the sector for potential innovations has grown (Audretsch, Martínez-Fuentes & Pardo-del-Val 2011). Services are interactive and thus tend to have innovation patterns based on interactions across departments or at customer-provider interfaces (Gallouj & Djellal 2010; Kline & Rosenberg 1986). Of particular interest to this study is the knowledge processes at work within organisations, encompassing the creation, use and diffusion of knowledge, which appear to be greatly significant to the organisations' innovation capabilities (Leiponen 2006). Authors such as Howells (2010) indicate that currently there is only a limited view on how these processes act in the workplace.

5.4.1 Sampling frame

A service industry that has many opportunities for organisations to collaborate is critical for this research. The logistics industry offers many nodes where organisations have opportunities for interaction. The logistics industry creates a

transport and storage network, connecting suppliers and customers to convey freight for example from manufacturing sites to retail outlets. The resultant freight network provides many opportunities for interactions amongst logistics service providers. The Australian logistics industry is chosen for the sample due to its significance and major impact on the economy. The $94bn industry contributes approximately 3.1 per cent to Australian GDP (Bureau of Transport Economics 2001; Kittel & Haugstetter 2011; KordaMentha 333 2012; National Australia Bank 2012). The Australian Logistics Council (2012) suggests the significance of its impact on the Australian economy is greater, indicating a 14.5 per cent contribution to GDP. Additionally the industry is a major employer, employing approximately 1.2 million people in some 165,000 enterprises; 135,000 of these enterprises employ less than 10 people (Australian Logistics Council 2012; CILTA 2009; Transport & Logistics Industry Skills Council 2013). Furthermore in Australia the task of freighting goods is expected to provide ongoing growth in demand for the logistics industry over both the short and medium term (KordaMentha 333 2013; Transport and Logistics Industry Skills Council 2013). Despite apparent opportunities for interaction and collaboration, recent research highlights low levels of collaboration in the logistics industry in Australia (Storer & Hyland 2011; Torugsa 2011) providing additional impetus to investigate the industry.

5.4.2 Unit of analysis and elite sample

Due to its linking role between the formulation of problems and the nature of the data collected, an important component of the research design process is determining the most appropriate unit of analysis (Brewer & Hunter 1989). In this research study the

unit of analysis is the individual, senior manager in the Australian logistics industry who is involved in collaboration.

The status of the key informants gives them a special qualification arising from their status, namely membership of the senior management team. The key informants are able to report on organisational properties and provide information at this aggregate level, rather than expressing personal views (Kumar, Stern & Anderson 1993; Phillips 1981; Seidler 1974). For individual members of senior management teams, shared meanings are likely, albeit tempered by individual experiences and understandings (Rubin & Rubin 2005).

Within the sampling frame of Australian logistics organisations, the sample will comprise senior managers to access their expertise in the issues relevant to this thesis, strategic intent, collaboration and knowledge creation and transfer. Senior managers provide improved reliability based on their increased levels of experience and their higher hierarchical roles (Homburg et al. 2012; Kumar, Stern & Anderson 1993). Significantly there are fewer studies that focus on business elites. This study may additionally make a contribution to address existing information asymmetry (Mikecz 2012; Odendahl & Shaw 2002).

The interviewees will have a level of seniority within the organisation, enabling a significant and direct contribution to shaping corporate practices (DeGroot, Kiker & Cross 2000; Elenkov, Judge & Wright 2005; Thomas 2012). They can be classified as an elite group, due to their positions of power in their organisations (Harvey 2011; Odendahl & Shaw 2002; Smith 2006). Recognising that such knowledge is from

their individual perspective (Rubin & Rubin 2005), nonetheless their insights on strategy in practice are invaluable relating to collaborations and knowledge creation and transfer for this study. The key informants approached to participate in this study are those who hold senior management positions, such as Chief Executive Officers (CEOs), Managing Directors (MDs) or equivalent positions.

The sample is drawn from the Company360 (2012) database to find the names and contact details of senior managers in the Australian logistics industry. The Company360 database provides comprehensive business intelligence on more than 50,000 leading public and private Australian companies, based on Dun & Bradstreet's commercial database. The Company360 database is searched using the term logistics, creating a list of organisations from which to draw the sample. Despite random samplings' generation of unbiased estimates of the population characteristics facilitating the calculation of sampling error (Collis & Hussey 2003; Singleton & Straits 2002), the list will then be stratified into large, medium and small companies.

Stratifying the sample by company size yields comparative data on the phenomena of interest for these subgroups, enabling generalisation for these specific groups (Flyvbjerg 2011). Systematic sampling is employed to generate the sample, to ensure equal representation of organisation size, a risk with simple random sampling (Cannon 1994; Collis & Hussey 2003). This approach is chosen for efficiency, but given that large and medium sized organisations are more likely to collaborate, a disproportional stratified sample is purposefully selected to generate a sample that has knowledge of the phenomena of interest, (Creswell & Plano Clark 2011; Zikmund 2010). Any differences within the population regarding these phenomena

of interest due to company size will be evident (Creswell & Plano Clark 2011). The alphabetical ordering of the organisations in the database will yield random results as there is unlikely to be any periodicity distorting the sample (Zikmund 2010).

Sample size is affected by the interrelated factors of heterogeneity of the population, level of precision required, sampling design, available resources and any planned investigations into groups present in the analysis (Singleton & Straits 2010). Sample size can vary according to the qualitative component of the mixed methods approach being used. Generally it is smaller than for a rigorous quantitative study (Creswell & Plano Clark 2011).

5.5   Data collection

Organisations involved in the Australian logistics industry provide the context for the data collected for this research thesis. There are two data sources used in this thesis. Secondary data will be collected from publically available information published on the sample organisations' websites. The information collected will relate to their vision statements and any other pertinent information.

Being an exploratory study to better understand the phenomenon of knowledge creation and transfer in collaborations, the qualitative and quantitative aspects of this mixed methods research enables the investigation of senior management practice (Molina-Azorin 2009). The strategy practices of senior managers are investigated; they are key informants and the primary data source. The respondents' interpretation of their experiences of the described phenomena of interest is important to the outcomes of this research. Open-ended questions are necessary to explore the

complex issues involved. Respondents will not generally complete mail surveys if they require much writing, making an interview more appropriate (Czaja & Blair 2005; Kvale 1983). Interviews enable access to reach the reality of participants' lived world, overcoming distance in space and time (Peräkylä & Ruusuvuori 2011) and are therefore effective for eliciting information on past events, such as collaborations that have involved senior managers. Following an embedded protocol, the quantitative data can be collected simultaneously (Creswell 2011).

There are methodological challenges involved in interviewing elites. Deciding to obtain information from senior managers raises the issue of how best to approach them (Harvey 2011; Odendahl & Shaw 2002). Interviewing senior managers such as CEOs is a traditional approach (Frost, Birkinshaw & Ensign 2002). The advantages for this study include gaining access to their expertise (Kumar, Stern & Anderson 1993; Phillips 1981; Seidler 1974). Senior managers are knowledgeable of a wide range of issues garnered from their position in the organisation such as its history, activities, policy and plans, which will enrich their responses (Marshall & Rossman 2006).

Conducting a telephone survey will overcome the difficulties of interviewing senior managers (Odendahl & Shaw 2002). Senior managers face many demands on their time due to their responsible positions making it difficult to gain access (Aberbach & Rockman 2002; Laurila 1997; Marshall & Rossman 2006; Mikecz 2012; Odendahl & Shaw 2002). Besides they tend to have effective gatekeeper systems in place (Laurila 1997; Mikecz 2012; Odendahl & Shaw 2002). A telephone interview increases flexibility in terms of access.

5.5.1 Telephone survey

Telephone surveys are being used increasingly in business research as a data collection method. The telephone interview has become more widely-accepted globally with increasing telephone penetration (Czaja & Blair 2005; Holt 2010; Stephens 2007; Taylor 1997). Initially telephone interviews were not held in high regard with questions raised relating particularly to validity and quality (Cahoon 2007; Cannell 1985; Czaja & Blair 2005; Frey & Oishi 1995; Kraus & Augustin 2001; Singleton & Straits 2002). However its successful use in a range of surveys for instance public opinion polls, sensitive personal issues and more specific sub-group interviews, such as senior managers has seen its use increasingly accepted (Czaja & Blair 2005; Frey & Oishi 1995; Holt 2010; Kraus & Augustin 2001; Taylor 1997). Such acceptance has arisen due to the many advantages of the approach.

In qualitative studies it remains less widely used (Sturges & Hanrahan 2004). However Cachia and Millward (2011) advocate its use, arguing that the telephone interview provides quality data and overcomes many disadvantages of face-to-face interviews and provides methodological validity (Sturges & Hanrahan 2004). Further, Cachia and Millward (2011) argue that nowadays people are very familiar with telephone conversations and easily overcome limitations such as lack of physical presence, ability to observe facial expressions and visual cues. There are greater difficulties in assessing the body language though paraverbal cues, such as vocal qualities (Harvey 2011; Schwarz, Groves & Schuman 1998). However senior managers, who spend a large amount of time making telephone calls, would be particularly adept at communicating clearly on the telephone.

A telephone survey is less intrusive and will facilitate cost efficiencies, speed in data collection, more personal information being forthcoming and reduction in total survey error (Cahoon 2007; Cannell 1985; Czaja & Blair 2005; Frey & Oishi 1995; Stephens 2007). The logistics industry is Australia-wide, a large geographical area, so enabling savings related to travel, accommodation and interviewers' time for surveys is important (Czaja & Blair 2005; Frey & Oishi 1995).

A risk with telephone surveys is receiving shorter answers and reduced interview time, adding to the survey error (Sturges & Hanrahan 2004). Harvey (2011) found no difference in the length of interviews when comparing telephone and face-to-face. This study is targeting senior managers, reducing the likelihood of any disadvantages arising from using a telephone survey (Harvey 2011; Keller 1963; Marshall & Rossman 2006; McDowell 1998; Mikecz 2012; Zuckerman 1972). Following Harvey's (2011) view that overall the disadvantages of telephone interviewing are outweighed by its advantages and, given that business elites are the target respondents, telephone interviewing is adopted for this study.

Having decided to use a telephone survey, the questionnaire is developed. The approach of considering both the questionnaire and the sampling design concurrently continued to ensure the combination of the sample and the questions provide inferences on the phenomena of interest for interpretation. The process was guided throughout by the research questions (Schwarz, Groves & Schuman 1998). Survey design is the focus of the next section.

5.6   Survey design, pre-testing and administration

The survey instrument is designed to simultaneously collect the qualitative and the quantitative data by embedding the questions in the one instrument, to facilitate data collection from the senior managers (Molina-Azorin 2009). Designing the research in this way assists practitioners to express elements of their internalised knowing and share the logic of their practices (Chia & MacKay 2007`).

5.6.1   Designing the telephone interview instrument

Good design of the questionnaire is critical to achieve the desired results of the survey, ensuring it is relevant and gathers accurate information, leading to reliability and validity (Zikmund 2010). Attending to aspects of the survey design process can shape the quality and quantity of the responses to achieve best possible outcomes as the survey instrument and its associated protocols are developed. Key elements are rewards, costs and trust, based in social exchange theory (Dillman 2000). Dillman's (2000) tailored design method was followed as it provides a valuable guide for the survey design process.

5.6.1.1 The opening section of the telephone interview instrument

Following this design process, the opening section of the questionnaire included information on the legitimate authority, the Australian Maritime College (refer Appendix A). To reduce respondents' listening time and keep them involved in the interview, a brief introduction commences the interview (Lavrakas 1993); being open and straightforward about the goals of the research sets the tone from the start (Mikecz 2012). In this brief introduction, the value of the respondent's contribution

is also emphasised, making participation more likely (Laurila 1997; Mikecz 2012). Additionally the significance of the study outcomes to the Australian logistics industry and making the questionnaire appear to be short and easy were stressed (Dillman 2000). Incorporating these elements as part of the instrument and interview protocols improves outcomes. Several opportunities were given in the opening section for respondents to ask questions in the introductory comments to the questionnaire as elites are likely to ask questions about the goals and use of the proposed research at the start of an interview (Odendahl & Shaw 2002). Information on the ethics consent form, their willingness to participate and a request for recording the interview form part of this introductory stage. Alreck and Settle (1995), Mikecz (2012) and Lavrakas (1993) indicate the opening two minutes are crucial to completion of the telephone survey and the generation of a high response rate. Assuring the respondents of the confidentiality of their comments and notifying them that their rights are protected during data collection, is crucial at this stage (Israel & Hay 2006; Sarantakos 2005). Refusals to complete are less likely to occur once the interview has begun. Oksenberg, Coleman and Cannell (1986) for instance indicate that forty per cent of refusals occur in the first few sentences, fifty per cent in the introduction but only ten per cent once the interview has begun. Further the requests for personal information were minimised throughout the survey. These factors combined to assure the interviewees of anonymity in any published reports from the research; elites are often high-profile and generally prefer discretion (Odendahl & Shaw 2002). A checkbox is included on the front cover of the interview instrument to remind the researcher to collect website information before commencing the interview.

5.6.1.2 Preparing the questions in the telephone interview instrument

The questionnaire itself is divided into four sections. Each section has a specific focus. Table 5.1 summarises the sections of the survey, their focus and the number and type of question in each section.

The questionnaire comprises 59 questions in total, which are a mix of semi-structured and closed questions. Excluding the demographic questions, there are 23 open-ended questions and 28 quantitative questions. Questions are numbered in a consistent style. The questioning numbering system locates the question (referred to as an Item) in a particular section, providing ease of reference. For example the question on gender of the respondents is found in Section D; it is referred to as Item D8 throughout this thesis.

The telephone interview instrument serves as an interview protocol. Consequently an ice-breaker question, such as Item A1 regarding the respondents' activities was used to ensure the conversation flowed. This question clearly states the length required, to give respondents an indication of what is required (Fowler 1995). Probes, such as Item A15 'Can you tell me more about why that is?', were included to elicit thoughtful answers. Sufficient space was allowed to record the responses to such probing questions. (Creswell 2009, 2013). Such considerations are important due to their effect on key elements of the research process, such as the duration of the interview, engaging the respondents and eliciting quality data.

Table 5.1   Summary of question type in the telephone interview instrument

Section	Focus	Number and type of questions
Section A	Strategising	9 qualitative 9 quantitative
Section B	Collaboration	12 qualitative 12 quantitative
Section C	Knowledge creation and transfer	3 qualitative 6 quantitative
Section D	Demographics	2 qualitative 6 quantitative

Clear and consistent visual guides are used throughout the questionnaire to assist the interviewer with both pre-attentive and attentive processing to reduce the risk of error by the interviewer (Dillman 2000). For example the questions are numbered in a consistent style, there is the same amount of white space between questions and symmetry has been maintained throughout the questionnaire. Special instructions are clearly outlined throughout the document (Dillman 2000). To further assist clarity and reduce confusion, question routing and the text to be said to the interviewee are clearly differentiated from the interviewer's perspective (Cahoon 2007). Consequently in this survey instrument both the interviewer prompts and the

question routing are italicised. Boxes are placed around prompts to further reduce risk of confusion by the interviewer. Coding of responses to quantitative questions is prepared by numbering potential responses. Probing techniques are also noted on the survey instrument to assist in eliciting further detail to reduce the likelihood that responses to open-ended questions may be short (Alreck & Settle 1995; Cannell 1985; Lavrakas 1993).

The questions were sorted into sections and topic areas to assist the senior managers better organise their responses to suit their own mental frameworks, to increase accurate answers (Fowler 1995). Semi-structured questions increase response validity and assist elite interviewees (Aberbach & Rockman 2002; Harvey 2011; Odendahl & Shaw 2002). The senior managers can thus articulate their ideas and perspectives, without the limitations imposed by closed-ended questions, making them more receptive to the interview process (Aberbach & Rockman 2002; Harvey 2011). According to Fowler (1995), managing the meaning of answers is important to reduce distortion caused by respondents concern over how their answers will be judged. To offset this risk, some questions, such as Items A5 and A15 were designed so that respondents could elaborate on their answers, using their own words to clarify their perspective (Fowler 1995; Schuman & Presser 1981). Several other questions, for instance Item B5, were included at a point in the survey where there was already clarity about the intended meaning. Further ensuring there were sufficient questions relating to their opinions holds the interest of senior managers, rather than the stock organisational response (Odendahl & Shaw 2002). For example Items B23 and B24 asked the respondents their opinion on the likelihood of collaborations increasing in

Australia in the future. Grouping the two questions together enabled both qualitative and quantitative data to be collected from the responses.

Moreover consideration was given in the questionnaire design to accentuate the role of strategising artefacts, such as organisation vision statements and their interplay with senior manager's activities. For example Items A4 and A7 ask about strategic intent and organisation vision. Later in the survey in Item B7 the respondents are asked how strategic intent is applied in decision-making (Gubrium & Holstein 1997; Holstein & Gubrium 2011). Questions such as Items A2 and A3 were asking for similar information in different ways, building redundancy into the instrument. This provides a check for consistency from the responses (Rubin & Rubin 2005). Questions such as Items A2 and C4 were included with a list of potential answers to improve reliability and validity of responses (Schuman & Presser 1981). Similar attention was given to the demographic questions to reduce respondent stress by providing pre-assigned categories (Fowler 1995).

Questions are presented in personal terms, establishing the importance of the participants' opinions and insights, and clarifying that the interviewee is willing to learn from their expertise. This overcomes the risk of elite interviewees being adept at managing the interview and presenting the public face of an organisation (Laurila 1997; Marshall & Rossman 2006; Mikecz 2012). For example Item A9 asks about the respondents' daily activities and how the organisation's long-term strategic intent influences their own strategic decisions.

The duration of the interview is a key consideration in the design of the telephone interview instrument, as a short interview may be detrimental to data quality (Cahoon 2007). Further respondents appear to lose track of time in telephone interviews once started making timing issues important (de Vaus 2002; Frey & Oishi 1995). There are mixed opinions in the literature on the optimal duration of an interview with senior managers. Lavrakas (1993) for example advocates shorter interviews to reduce both interviewer and respondent fatigue and thus increase the probability of a successful completion. Respondent fatigue may occur after twenty to thirty minutes (Gillham 2000b; Lavrakas 1993). In contrast de Vaus (2002) and Dillman (1978) suggest that too short an interview sends the respondents the message that the topic, and by inference their contributions, are not that important. Frey and Oishi (1995) suggest fifty minutes is possible in a telephone interview; Cahoon (2004) confirms this timing with interviews of an average duration of sixty-two minutes. Stephens' (2007) semi-structured telephone interviews averaged one and a half hours. Possibly the differences of opinion may be explained by senior managers being interested in the topics, rapport with the interviewer and the reputation of the interviewer's institution. These factors may counter the fatigue (Converse & Presser 1986; de Vaus 2002; Lavrakas 1993). Given that senior managers are time-poor, the questionnaire is designed to create an interview of approximately 30 minutes. This provides a positive message that the study is important, but takes into account the risk of respondent fatigue. Additionally call-back options are included in both the questionnaire and the preambles to the confirmatory phone call sheets to further assist if more time is needed (Aberbach & Rockman 2002; Lavrakas 1993).

The questions will be asked over the telephone so the ease of speaking for the interviewer and simplicity were considered in question design (Czaja & Blair 2005). Question comprehensibility is a critical feature of survey design, to ensure that the respondent is answering the question the researcher has in mind, both the literal and pragmatic meaning of the question (Schwarz, Groves & Schuman 1998). Vague and ambiguous terms such as often or words used infrequently were not included to reduce interpretation risks of response quality (Czaja & Blair 2005; Lenzner 2012). Question clarity, ease of pronunciation and lack of ambiguity were thus central to the design of this survey's semi-structured and quantitative questions. For example Items C7 and C9 were carefully phrased to allow collection of two responses simultaneously. Moreover reading questions exactly as presented, using probes to prompt better answers, recording answers and maintaining a neutral, professional relationship with respondents all contribute to the conversational environment (Fowler & Mangione 1990). This was also facilitated by organising the questions in a logical way to reflect the topics of interest, enabling clarity of thinking with transitional phrases as guides to direct respondent's thinking (Czaja & Blair 2005; Lenzner 2012).

In designing the research instrument, both the context that a question is asked in and the response alternatives offered were carefully considered, for instance in Item C4. Respondents use these to assess the intended meaning (Schwarz, Groves & Schuman 1998). Additionally respondents may consider their response before speaking, to give themselves time to edit their judgement (DeMaio 1984). The questions in this survey were designed to be non-threatening, to encourage open and frank responses and thus reduce editing by the respondents (Fowler 1995). These above considerations and the

research questions were kept in mind throughout the design process. The survey instrument addresses the research questions. Table 5.2 summarises how the survey instrument links to the key variables in the conceptual model, the research questions and contextual questions of interest to this study.

5.6.1.3 The closing section of the telephone interview instrument

At the end of the survey instrument a closing statement was inserted. This ensures no significant areas have been overlooked in the respondent's view, that the questions are clearly focused and the interview process was well prepared. It also allows for any other comments, observations and criticisms of the research. The closing statement may generate some feedback at the completion of the questionnaire and may also identify follow-up projects from the respondent (Harvey 2011). A copy of the final report is offered at this stage as a reward for participation as elites are interested in receiving something in exchange for their time (Blau 1964; Odendahl & Shaw 2002). A final thank-you statement for the participant is included here (Dillman 2000; Singleton & Straits 2002).

Table 5.2   Variables, research and contextual questions, Items on survey

Variable	Research question	Key items on survey
Strategic intent	PRQ1; SRQ1	A.2; A.3; A.4; A.5; A.6; A.7; A.8; A.9; A.10; A.11; A.12; A.13; A.14; A.15; A.16; A.17
Collaboration	PRQ1; SRQ1; SRQ2	B.1; B.2; B.3; B.4; B.5; B.7; B.9; B.11; B.12; B.13
Knowledge creation and transfer	PRQ1; SRQ1	B.16; B.17; B.21; B.22; C.5; C.6; C.8; C.9
Absorptive capacity	PRQ1; SRQ3	C.2; C.3; C.4; C.5; C.7; D.4

Contextual questions		
Business ecosystem		B.23; B.24; D.1; D.2
Senior management role		A.1; C.1; D.3
Demographics		D.5; D.6; D.7; D.8

5.6.2 Pre-testing the telephone interview instrument

The survey instrument was pre-tested to improve the final version by using feedback to revise and refine the questions, layout and flow (Czaja & Blair 2005; Dillman 2000; Schwarz, Groves & Schuman 1998; Singleton & Straits 2002). In this study, the pre-testing process contained two stages. Firstly the questionnaire was pre-tested by people of different backgrounds and areas of expertise to ensure that the questions were clear, not ambiguous and appropriate. The questionnaire was pre-tested by 23 people, having a mix of 6 industry professionals, 10 academics, 4 doctoral students and 3 administrative personnel (Dillman 2000). Typically in field testing 25-30 interviews may be conducted with a convenience sample similar to those in the target population (Singleton & Straits 2002).

The documents pre-tested were the Advance letter (refer Appendix B), the Participant Information Sheet (refer Appendix C), the Consent Form (refer Appendix D) and Response Cards (refer Appendix E), in addition to the questionnaire itself. The Advance letter and the Participant Information Sheet assist with gatekeepers and ensure the senior managers are better informed of the benefits of the survey, increasing access. A pre-test checklist and guide was developed and provided to each person as part of the pre-test package, with a covering letter (Dillman 2000) (refer Appendix F). Key issues for consideration were indicated in three distinct categories. Firstly issues relating to layout, for instance logical numbering of the questions, meaningful transition statements and clear instructions for the interviewer. Secondly, issues related to completing the questionnaire, such as time taken to complete the

survey and question clarity. Finally, the pre-testers were asked to focus on the purpose of the questionnaire, to identify if they considered any key issues linked to the central topics were missing or redundant questions included for example. The feedback from the pre-test was considered by the researcher and both doctoral supervisors, particularly comments relating to terms used by practitioners for knowledge creation and transfer. To reduce ambiguity, it was decided that further clarity would be gained by using new ideas, innovation and learning throughout the survey to reflect knowledge creation and transfer. Other minor changes were made to the documents, such as phrasing in the Advance letter, question wording to remove other ambiguity and ordering to improve flow.

In the second stage of the pre-test, the researcher conducted three practice telephone interviews using the finished questionnaire to do a final polish of the questionnaire, hone technique and ensure there were no issues relating to its effective administration in the field (Czaja & Blair 2005). Such training reduces variability as even experienced telephone interviewers can make mistakes, such as reading questions too fast or occasional pronunciation errors. One practice interviews was also recorded so the researcher could become familiar with the technical aspects of the interview process. The recorded interview was also reviewed by the researcher to improve the conversational approach adopted, as the researcher's vocalisation may affect willingness to participate (Oksenberg, Coleman & Cannell 1986).

5.6.3 Administration of the telephone interview instrument

A multi-contact approach is taken to the senior managers to improve the success rate of the telephone survey (Cahoon 2007). He advocates a three-pronged approach,

namely an advance letter, confirmatory telephone calls and call-backs prior to conducting the telephone interview as the final stage.

5.6.3.1 Advance letter and ethics approval

The Advance letter enables the interviewer to overcome issues associated with gatekeepers and cold-calling, particularly surprise and refusal to discuss, increasing response rates (Frey & Oishi 1995; Hembroff et al. 2005; Laurila 1997; Lavrakas 1993). Empirical support for this approach is provided by Traugott, Groves and Lepkowski (1987) who found it improved response rates by ten per cent. Aberbach and Rockman (2002) found it helpful when accessing political elites. Frost, Birkinshaw and Ensign (2002) achieved a response rate of 13 percent following this technique with multinational subsidiaries, which is within the normal range for such studies.

Advance letters show the sponsoring institution on the letterhead, showing both the legitimacy of the study and enables respondents to contribute to its aims (Frey & Oishi 1995). This key information can increase response rates, providing a crucial element in establishing trust and credibility (Creswell 2009). Respondents may consider this demonstrates the importance of the research study. Respondents who have possibly received past benefits from that institution may feel inclined to repay that obligation. Moreover the Advance letter provides an opportunity for the purpose to be conveyed to participants (Sarantakos 2005). Establishing trust and building rapport with senior managers can be more difficult. Including pre-interview transparency contributes to their development (Harvey 2011; Mikecz 2012).

Sending out an Advance letter enables simultaneous despatch of a response card and the consent form to the senior managers. Response cards are visual cues that can help overcome the disadvantages of telephone interviews, reduce recency effects and memory errors that may arise if there are at least five possible responses (Frey & Oishi 1995). The consent form, based on the Tasmania Social Sciences Human Research Ethics Committee template, enables participants to give informed consent before engaging in the research process (Creswell 2009; Israel & Hay 2006). To minimise the ethical risks and to gain an objective view of the research process and premises, conducting the research has been approved by the Tasmania Social Sciences Human Research Ethics Committee. Its approval number is H0012879. This Committee has reviewed the research study and thus reduced risk of ethical bias. The research is unfunded, negating the risk of funding being utilised that could bias the research. Further the author is compliant with the ethical considerations of the leading management academics (Academy of Management 2005).

The privacy of the research subjects and the confidentially and anonymity of their responses is guaranteed, to minimise the potential for deception throughout the research process (Babbie 2011). Providing the right to decline to participate or decline to answer particular questions respects the rights of participants and reduces ethical issues relating to treating people as objects of investigation (Schwarz, Groves & Schuman 1998). Additional protection of the participant's voice is provided by enabling withdrawal from the project before data is published if requested, as detailed in the Participant Information Sheet (Creswell 2009).

The Advance letter describes the research process and explains that confirmatory telephone contact will occur to schedule a time convenient to the respondent to help focus elites so they are prepared to speak directly on the issues of interest (Frey & Oishi 1995; Odendahl & Shaw 2002) Respondents receive the Advance letter and ethics information in hardcopy through the postal service. As the advantages of an Advance letter are dependent on it being read by the senior managers (Hembroff et al. 2005), a confirmatory telephone call is made.

5.6.3.2 Confirmatory telephone calls

The confirmatory telephone calls are the second prong of Cahoon's (2007) approach. The calls commence approximately one week after the Advance letter is received by respondents. The comments are scripted and kept as brief as possible, given the importance of these introductory comments to reducing termination and retaining participant interest. The focus is on the purpose of the study and the value of the participant's contribution (Dillman 1978; Lavrakas 1993). Ensuring respondents have received the Advanced letter is an additional advantage of these confirmatory calls (de Vaus 2002; Lavrakas 1993). Dillman (1978) considers these comments to be critical to prevent termination, which is most likely to occur at this stage.

Facilitating the management of this confirmatory process, a call sheet is created for each respondent (refer Appendix G). The name, role and contact details are recorded for each person, ensuring both their suitability for the research study and their willingness to participate (Cahoon 2007). Moreover those who are willing to continue with the research interview at this point in time can then be interviewed. The potential respondents who want an alternate time have their preference recorded

on the call sheet, taking into account pertinent time zone differences. Interestingly Dillman (1978) finds that calling interstate or internationally increases the perceived importance of the study by respondents, which may make them more willing to participate.

5.6.3.3 Conducting the interview

Prior to commencing each interview, any information on the participant's website relating to the organisation's strategic intent or vision is collected. This will ascertain further information on their strategic intent regarding new ideas and innovation. Although authorship is uncertain, it is likely that senior managers are involved in the preparation and development of organisation vision statements before they are placed in the public domain (Barr, Stimpert & Huff 1992). With limited access to the senior management team of an organisation, using such documented data can provide a proxy of their mental models (Short & Palmer 2008). Utilising these vision statements in the research process is an opportunity to gain key insights into senior managers' thinking and the alignment with performance before conducting each interview (Short & Palmer 2008). By looking at such published data a documented picture of the organisation's approach to inter-firm relationships, knowledge creation activities and staff education and training may emerge.

The verbal delivery of the interview is critical to maintain respondents' interest throughout for completion of the questionnaire and to ensure ease of use by the interviewer (Dillman 1978). The study adopts a conversational flow to facilitate these processes and reduce natural breaks that may prompt the respondent to terminate the interview early (Cahoon 2007). To assist the flow, the questions are

grouped together thematically in the design stage so that respondents can remain focused on the topic (Alreck & Settle 1995; Frey & Oishi 1995). Transition statements are included to move between sections of the survey instrument whilst retaining the conversational style (Alreck & Settle 1995; Dwyer 2009). Additionally the interviewer includes conversational responses to both build rapport and encourage the flow from the respondent, noting that for a telephone interview there is a natural assumption that each party is listening so such acknowledgements do not need to be very frequent (Cachia & Millward 2011). Including comments such as 'I see', 'interesting' and 'uh-huh' demonstrate feedback and keep the conversation flowing (Cachia & Millward 2011; Dwyer 2009; Harvey 2011; Lavin & Maynard 2001).

Similarly a conversational approach of being friendly, courteous and professional is adopted; an approach appreciated by elites. This approach will also assist with eliciting valuable responses (Aberbach & Rockman 2002; Cahoon 2007; Odendahl & Shaw 2002). Such an approach facilitates eliciting answers that were not thought of by the research designer, providing an opportunity to learn unexpected information (Fowler 1995). Additionally commenting on the change of topics throughout will assist in maintaining the conversational tone and respondent interest; occasional comments on the time remaining will retain their focus (Harvey 2011). Further presenting to all respondents in a similar style during the interview is an important element of survey delivery, providing a standardised environment (Czaja & Blair 2005; Fowler & Mangione 1990; Singleton & Straits 2002). Finally, at the end of the interview the respondent will be verbally asked for permission to follow-up with

questions if additional clarification is required, once the transcript is reviewed (Mikecz 2012).

The interview is a managed conversation, albeit more formalised and professional than everyday encounters, focusing on issues central to the research study (Cachia & Millward 2011; Farr 1984; Kvale 1983). Establishing a conversational mode facilitates franker discussions, with respondents taking a more thoughtful approach (Schwarz, Groves & Schuman 1998). Elites often respond better to an interactive interviewing style (Holstein & Gubrium 1995; Patton 2002). In the interview meaning is co-created, demonstrating links between epistemology and methodology (Patton 2002). The interviews will be recorded to assist with facilitating a conversational style and the establishment of rapport. A key additional benefit is it will reduce information loss (Aberbach & Rockman 2002; Cachia & Millward 2011).

Although the status inconsistency and the perception that the elite manager is doing a favour for the researcher can pose difficulties in these interviews (Herod 1999; Welch et al. 2002), researcher knowledgeability provided by the comprehensive literature review will help address this difficulty. Further researcher knowledgeability allows better conceptualisation of the issues they are likely to face, assisting getting obtain quality information (Marshall & Rossman 2006; Mikecz 2012). Knowledgeability will also reduce the risk of the interviewee on the topic and its relevance, improving response quality (Harvey 2011; Zuckerman 1972). Additional information from the internet websites of participating organisations will be collected prior to the interviews. Investigating phenomena from different perspectives gives a more informative view and facilitates more insight (Torrance

2012). Such triangulation of data, method and theory enhances the interpretive approach (Denzin 1970).

5.7   Error control process

Throughout any research study there are multiple opportunities for error to be introduced, for instance during the research design, the interview and in analysis (Schwarz, Groves & Schuman 1998). Besides concerns on potentially introducing error, a related aspect that requires attention is measuring it and compensating for it in the analysis (Singer 2006). Having followed the tailored design method, total survey error is reduced as sampling, coverage, measurement and non-response errors are minimised (Dillman, Smyth & Christian 2009; Groves 1989; Singleton & Straits 2002). Dillman (2000) indicates that making efforts to reduce each of these errors to acceptable levels is the key factor in survey design. The reduction of error was a key focus during the survey design process, with care being taken to reduce error at every opportunity in the survey development process.

For instance, sampling error arises from the selection process to obtain the sample (Dillman 2000; Groves 1989). As discussed above, in this study systematic sampling has been undertaken to minimise this risk. Coverage error, the completeness or otherwise of the list from which the sample was drawn is a second survey error that can arise (Dillman 2000). For this survey, the chosen database for selecting the sample is Company360 (formerly Who's Who). This database has a population of 50,000 leading public and private companies in Australia, reducing the risk of this error.

Response bias, the effect of nonresponse on the survey (Dillman 2000), arises from both unit nonresponse and item nonresponse (Groves et al. 2011). Unit nonresponse in this stage of the research process arises from either participant refusal or non-contact in a probability sample, drawn to provide unbiased inferences (Czaja & Blair 2005; Groves 2006; Groves & Couper 2012; Singer 2006). To reduce unit nonresponse error in this study, replacement participants were randomly drawn from the population. Item non-response was minimised by the pre-testing process, the conversational approach taken, the assurances of confidentiality and the logical construction of the survey to guide thinking and engagement of the respondent.

Measurement error for example arises from the interviewer, the respondents, the questions and the mode of data collection (Singleton & Straits 2002). It occurs when the respondent's answers are inaccurate, ambiguous or, for some reason, are unable to be compared with other respondent's answers (Dillman 2000). Poor question wording and inattention to questionnaire design considerations can cause this error. In this research study the extensive pre-testing process and interviewing respondents via telephone was designed to reduce measurement error. Homburg (2012) cautions that utilising key informants can increase two types of measurement errors, namely systematic measurement error and random measurement error. Systematic measurement error, or bias, is difficult to detect but will be minimised by the rigorous pre-testing procedures adopted, double checking the data entry procedures and the triangulation with web-based data (Trochim 2006). To reduce the random measurement errors, questions were made as clear as possible, the survey was pre-tested and there were several instances where the same question was asked in a different way (Trochim 2006).

There are two key technical considerations relating to the construction and evaluation of measurement, namely reliability and validity (Babbie 2011). The ambiguous nature of social constructions makes it impossible to achieve perfect reliability and validity in social science research (Neuman 2011). Reliability is important as it reduces the probability 'that bad managerial decisions will result from using the data' (Rust & Cooil 1994, p. 11). Reliability however, based in the possibility of replicating results, does not ensure accuracy (Babbie 2011). Reliability is increased by asking experts questions relating to their areas of expertise, such as the senior managers holding higher hierarchical roles in this research. In this case the questions relate to strategy, in which they are experts. Combining this with information on their years of experience indicates their degree of competence in this context (Guest, Bunce & Johnson 2006; Romney, Weller & Batchelder 1986). Further the information being collected for this study is primarily based in the present or recent past, increasing the reliability of the key informants (Homburg et al. 2012). Qualitative reliability occurs when the researcher's approach is consistent across various researchers and projects (Gibbs & Flick 2007). The risk of inconsistency across researchers is reduced with only one researcher in this study. Training and practice in the form of the pre-testing process will reduce measurement unreliability (Babbie 2011). In this mixed methods study, the limited amount of inferential statistics will reduce its reliability (Babbie 2011).

The combination of qualitative and quantitative aspects of the study requires strategies throughout the data collection, data analysis and interpretation stages to ensure validity that might otherwise be compromised during the creation of the narrative that combines the different research approaches (Creswell & Plano Clark

2011). Although academic discussion of validity is recent in mixed methods research (Onwuegbuzie & Johnson 2006) it is a major issue to be addressed by the researcher (Creswell & Plano Clark 2011; Tashakkori & Teddlie 2003). In this concurrent study, the strategies utilised include using the same population for both sets of data collection in the interviews and having common research questions (Creswell & Plano Clark 2011).

Validity demonstrates that the research report is accurate, trustworthy and credible (Lincoln & Guba 1985). Validity will be assessed by both face validity and construct validity (Babbie 2011`). Face validity and construct validity are determined by the pre-testing process of the research study and the literature reviews, which includes other author's conceptualisations of the constructs. Moreover validity is derived from the analytical procedures adopted, including drawing on published website information (Creswell & Plano Clark 2011). Validity is improved by paying attention to the process of doing the analysis, particularly with the blending of information in this mixed methods study (Huberman & Miles 2002). Journaling and memo writing will occur during data analysis of this study to improve validity. By incorporating data from two sources and looking for convergence, including negative information, using thick description and including self-reflection relating to bias, validity will be increased (Creswell 2009).

5.8   Summary

Qualitative research provides the researcher with the opportunity to explore and thus better understand the phenomenon under investigation. Drawing on insights from the people involved, a rich description can be developed. Aiming to achieve such

description has been the guiding principle for the research design process as outlined in this chapter. Recognising that this is an exploratory study of complex concepts the concurrent embedded strategy, a mixed method research design, was chosen to enhance the qualitative data with descriptive statistics. Capturing complex phenomena requires a research design that enables nuances to be captured and contextual information analysed.

Utilising a concurrent embedded mixed methods research strategy allows qualitative data to be enriched with descriptive statistics. Mixing methods facilitates key dimensions of the complex constructs involved to be elucidated and considered in light of the perspectives developed in the literature, particularly with the qualitative data. Moreover the quantitative data makes further insights possible, for example by comparing stratified data. Elite groups such as the senior management team have a perspective that has developed over years of experience. Investigating their experiences in the practices of collaborations brings insights to the development of absorptive capacity, knowledge creation and transfer with regard to strategic intent.

Approaching the elite respondents for telephone interviews is a cost-effective approach that creates time savings and reductions in total survey error too. Response rates tend to be higher, increasing the validity of the study. Paying due care to the processes involved in contacting the elite group and in designing the questions to generate responses which express their opinions further ensures the research is meaningful. Analysing their responses and the information on the websites with content analysis and descriptive statistics chosen here will give a diverse snapshot of aspects of organisational life to address the research questions. The relevant error

control processes have been applied to ensure reliability and validity of the research instrument and processes. The following chapter provides the data analysis and discussion.

Chapter 6 Findings: collaboration in the Australian logistics industry

6.1   Introduction

This chapter reports the administrative details of this research, including the response rates. The demographic profiles of the senior managers and their organisations are then presented to provide an overview of the context of this research. Data analysis in this chapter combines the data from both the qualitative and quantitative components of the survey. Additionally, secondary data and the participants' responses are combined to develop a profile of the Australian logistics industry. Situating the analysis in this industry setting provides the context for the subsequent discussion of the respondents' views on collaboration and its role in achieving strategic benefits.

6.2   Response rates

Following the protocol established in the research methodology, the advance letter was sent to all 195 organisations from the logistics industry derived from the Company360 database. Nineteen letters were returned, showing the business had either moved without leaving a forwarding address or gone out of business. The 176 remaining organisations were contacted as part of the confirmatory phone call. A further five organisations were found during these calls to not be in logistics, resulting in 171 organisations as potential respondents. During the initial systematic confirmatory phone calls, 29 potential respondents refused to participate. Of these, 12 of the non-respondents stated they were too busy to participate and 17 non-respondents either gave no reason for declining or were unavailable. Further telephone calls and emails were made to the remaining 142 potential respondents. Messages were left with gatekeepers as the direct telephone number of the potential

respondent was not available. The gatekeepers were usually personal assistants or telephone switchboard operators. The return telephone calls were then made to the gatekeepers. The main challenge in reaching the senior managers was receiving no direct reply despite messages being left with gatekeepers. On four occasions having a distinctive, buff, coloured paper for the advance letter made the letter easily found by the personal assistants among the awaiting correspondence. Email addresses were sometimes offered as an alternative way to contact the potential respondent rather than leaving messages, but the issue of non-reply remained. One respondent agreed to an interview, but when contacted at the agreed time was in another meeting. A further nine calls were necessary to reschedule. The gatekeeper of one potential participant cancelled his scheduled interview time five times due to an extended illness over two months. The interview did not eventuate. Offering to conduct interviews at times to suit the respondent resulted in three interviews occurring as respondents were driving into work early in the morning. In total there were 4.49 contacts per potential respondent, including the advance letter, any re-addressed letters, the confirmatory phone call and email requests.

A response rate of 18.7% was achieved after adjusting for incorrect addresses and similar problems, with 32 respondents agreeing to be interviewed. From the conversations with gatekeepers during some of the confirmatory and subsequent telephone calls, the senior managers appear to be extremely busy and time-poor. The potential participants' contacted were the CEO, the Managing Director (MD) or owner, as detailed on the Company360 database. Of the respondents, 69 per cent were the senior managers initially contacted. These most senior managers referred the advance letter to the remaining 31 per cent of respondents as being more

knowledgeable on the topics of the study. All were senior executives and managers. Interview responses were compared by date to check for non-response bias (Wallace & Mellor 1988). There was no discernible difference in the pattern of responses of the late responders; additionally, data saturation was reached (Baker & Edwards 2012).

The telephone interviews with the respondents were on average 51.25 minutes duration. The range of the interviews was 26-110 minutes, with a standard deviation (std dev) of 19.63 minutes. The lengthy, in-depth interviews suggest the senior managers were very engaged in the topics discussed and that telephone interviews are an effective research tool for this industry. The longer interviews occurred due to the senior managers providing rich detail during the open-ended questions. With such extended interviews, the respondents were asked several times during the interview if they were 'ok for time', given the interview was initially scheduled for 30 minutes. All continued, with only one respondent rescheduling the remainder of the interview for later in the day. He contributed the lengthiest interview of 110 minutes in total. None of the interviews were terminated early, indicating that telephone interviews are an effective way to reach senior managers and that telephone interviews are completed once begun. There were no item non-responses.

6.3   Data analysis methods

To address the research questions the data is analysed in two different ways, following Edmondson (2007) who suggests that descriptive statistics and content analysis are a useful combination for theory development in this stage of the research process. Descriptive statistics were used for the background information, rendering

the data more intelligible and for the embedded quantitative questions (Singleton & Straits 2010). The remaining open-ended questions and the secondary data will be analysed using computer-assisted qualitative data analysis (CAQDAS). CAQDAS enables a consistent transformation of the content of the interview texts into perceptive analysis by providing assistance with the volume of data obtained (Gibbs & Flick 2007). It enhanced the data by facilitating the development of coding, which helped manage the data into meaningful representations aiding interpretation (Krippendorff 2013). Such representations enabled patterns and possible explanations to be developed (Gibbs & Flick 2007). Content analysis is utilised firstly for the secondary data obtained from websites of the interview participants' organisation, namely the vision statements. Secondly, it is employed to investigate the data constituted by the text of the transcripts from the semi-structured questions in the telephone interviews. Initially, data from the survey instrument was recorded in Excel to assist with the data analysis.

The interviews were transcribed in NVivo, which enabled management of the large sets of data by both recording it and assisting with its categorisation and coding (Bazeley & Jackson 2013; Dutton & Dukerich 1991; Marcos & Denyer 2012). NVivo established an audit trail of the process followed during the analysis, adding reliability and consistency (Bazeley & Jackson 2013; Denzin & Lincoln 2000). Comparing the results of the interviews with the literature and the web pages assisted validation and triangulation of the findings (Marcos & Denyer 2012). Key data from the transcriptions were added to an Excel file, which enabled mixed methods data to be stored and displayed together in cells (Saldaña 2013). The summary Excel data is included in Appendix H. Descriptive statistics were also performed in Excel.

Numerical data and groupings were also transferred to SPSS for further statistical analysis. The qualitative data was analysed in both Excel and NVivo.

6.3.1 Descriptive and inferential statistics

Frequency distributions were used to examine the distribution of values of variables to facilitate interpretation, including the standard deviation, to see how well the mean represents the data (Collis & Hussey 2009; Pallant 2013). Tests for skewness, kurtosis and normality to investigate the symmetry of the distribution were undertaken to determine if parametric or non-parametric tests are appropriate for the inferential statistics (Collis & Hussey 2009; Pallant 2013). Inferential statistics investigating associations between variables were also undertaken (Tabachnick & Fidell 2007). The data was entered in SPSS to ensure accuracy in the calculations (Collis & Hussey 2009).

Demographic data was analysed to profile the respondents and their organisations (Singleton & Straits 2010). The participants' level of education, length of time in their current role and the organisation's size, in terms of numbers of employees and industry sector were used to form categories of respondents. Categorising the data by these profiles enabled comparisons to be made for different combinations of the data, such as stratification according to organisation size. Comparisons facilitated similarity-dissimilarity analysis and enabled more generalisations (Rubin & Rubin 2005). Having included questions on the background history and education levels of the respondents enabled a focus on the individual's history and practices which may additionally predict the dominant logic behind their strategic orientation (Chia &

MacKay 2007). Additionally credibility has been enhanced by interviewing individuals who hold varied perspectives (Rubin & Rubin 2005).

6.3.2 Qualitative data

The qualitative data was analysed following a staged process. These stages commenced with organising and preparing the data for analysis, such as transcription and reading through it several times to get a general sense of its meaning. Following a transcription an initial memo entry was made for each transcript, recording first thoughts (Bazeley & Jackson 2013) (refer Appendix I). These memos then formed part of the subsequent analysis. Each transcript was checked for mistakes, codes were defined for consistency and a log was maintained in a diary to increase reliability (Gibbs & Flick 2007; Rubin & Rubin 2005). Utilising NVivo, the information in the transcripts were coded into nodes using descriptive and provisional coding (Bazeley & Jackson 2013; Saldaña 2013). The summary of the descriptive and provisional coding nodes is included in Appendix J. The nodes were derived from a provisional set of codes determined by the literature review and the study's conceptual framework, including the indicators developed (refer Appendix K). Studying the data stored at each node then enabled themes to be explored iteratively (Plowman et al. 2007; Rubin & Rubin 2005; Saldaña 2013). The provisional coding, followed by coding into themes, final interpretation process, memo writing and writing up occurred simultaneously (Creswell 2009). The stages in the process were revisited several times (Gilmore & Carson 1996; Miles & Huberman 1994).

Rich data has been acquired from these extensive interviews. Transcribing the interviews resulted in a total of 330 single-spaced pages (average (ave) of 10.31 pages per interview, standard deviation (std dev) 5.10 pages). For each interview, the standard interviewer's questions (Items) on the interview instrument were not written out in full. In the transcriptions the questions were recorded by their Item number, such as A5, to clearly link to the survey. Ad lib questions and conversations that arose during the semi-structured interviews were however fully transcribed. Item nonresponse did not occur as all respondents answered all questions, except when they did not meet the specific criterion, such as Item A14 when question routing occurred for a negative response. Decision rules were developed for questions that were linked to others further in the survey (Zikmund 2010). Two respondents were reluctant to give their exact company turnover in Item D7, but replied to the broad-band categories listed, which was sufficient for the comparisons.

In the discussions that follow, quotes and specific information from the respondents are referred to as the Interviewee from, say, Company L003, shown in an abbreviated form as *Int.L003*. *Int* is used to designate interviewee. The L designates that the respondent was from a large company with more than 200 full-time employees, following the Australian Bureau of Statistics (ABS) classifications for size. The letters M and S were used to represent Medium (20-199 full-time employees) and Small (1-19 full-time employees) organisations respectively to stratify the sample. Besides the specific issues under investigation relating to the research questions, these data provided a snapshot of the Australian logistics industry from a senior manager's perspective, which is discussed after the following subsection on demographic details of the respondents and their organisations.

6.4   Demographic profiles of the respondents

Information gathered within the interview and from the Company360 database are the sources for the demographic data representing the sample of organisations involved in this study. The demographic details for the organisations and respondents involved are discussed next.

6.4.1 Industry sectors represented amongst the respondents

The Australian logistics industry is not homogenous, containing specialist transport, storage and distribution organisations. Such diversity is reflected in the respondent organisations, with 25% of respondents operating across multiple segments (Item D1). For example, *Int.M002* operates in the international freight sector, whereas *Int.L007* is a specialist rail transport provider.

Table   6.1   Different sectors of the logistics industry represented

Sector of the Australian logistics industry	Number of organisations	%
Transport, storage and distribution	8	25%
Freight forwarding, customs broking and 3PLs	8	25%
Multiple sectors	8	25%
Other	8	25%
Total	**32**	**100%**

Source: Item D1

The organisations in the sample are representative of a broad cross-section of the industry was planned, as seen by collating the responses to Item D1 as summarised in Table 6.1. The category, multiple sectors, includes organisations that operate in more than one logistics sector, for example both transport and storage.

There was at times a discrepancy in the full-time equivalent employee numbers when comparing the data received from the respondents in Item D6 with information available in the database. The information provided in the database is drawn from publicly reported figures. Consequently the numbers it reported were used as the basis of the classification for size for consistency in this study. The total organisations in each classification is summarised in Table 6.2.

Table 6.2   Representation by employee numbers

Size of organisation	Number	Percent	Cumulative Percent
Large, over 200 employees	13	40.6	40.6
Medium, 50-199 employees	14	43.8	84.4
Small, 1-49 employees	5	15.6	100.0
Total	**32**	**100.0**	

Source: Company360 database (2013)

Similarly the annual turnover in $million ($mn) reported in Item D7 by the respondents showed differences to the amount given in the Company360 database.

Table   6.3   Representation by turnover

Turnover per annum $mn	Number	Percent	Cumulative Percent
<$1mn	1	3.1	3.1
$1-4.9mn	1	3.1	6.2
$5-9.9mn	2	6.3	12.5
$10-49.9mn	8	25.0	37.5
$50-99.9mn	6	18.8	56.3
>$100mn	14	43.8	100.0
Total	**32**	**100.0**	

Source: Company360 database (2013)

For consistency it was decided to use the information in the Company360 database (2013), which is summarised in Table 6.3 above for the respondents.

6.4.2   Profile of respondents

The respondent's role titles are summarised in Table 6.4 below. The table shows the number of respondents in each position category and a breakdown of their specific roles, such as CEO. The respondents are an elite group, as evidenced by the seniority of their roles, substantial experience, formal qualifications and high levels of responsibility. The seniority and expertise of the respondents is indicated by their role title and reporting lines, which show seniority in the organisation.

Table 6.4   Respondents' role titles

Position category	Number	%
Owner/Director	13	41
- *Owner*	*6*	
- *Managing Director*	*7*	
CEO	7	22
- *CEO*	*6*	
- *International CEO*	*1*	
Senior Executive	3	9
- *Executive Vice President*	*2*	
- *Financial Controller*	*1*	
Senior Manager	9	28
- *General Manager*	*3*	
- *Other Senior Manager*	*6*	
Total	**32**	**100**

Source: Item D9

Of these respondents, 18 (56.3%) report directly to the Board, CEO, owner or international executive positions, including six (18.7%) who report directly to a senior executive with global responsibility, for example *Int.L003* reports to the Global CEO and *Int.S003* reports to the business owners in Europe.

Besides reporting lines, the respondents' experience and formal qualifications attained demonstrate their expertise. Item D3 evidences the experience of the

respondents in their current organisation. There are 53 per cent of the respondents with more than 10 years' experience in a senior management role in their current organisation, with several commenting that their total experience was greater. For example, *Int.M004* stated he had '*over 20 years' experience'*. Eight respondents had three years or less experience in their role. Of these, one was reporting for a new business start-up, only three months old. However he has 28 years management experience in the industry himself. The respondents thus have extensive experience at a senior level in the logistics industry in Australia.

Formal post-school qualifications, indicating acquired external knowledge, were held by 84 per cent of the respondents. The formal qualifications held by the respondents range from certificate to postgraduate awards, and are predominantly in business-related courses. There are 34 per cent of the respondents who have attained a Master of Business Administration (MBA) or similar postgraduate qualification, a further 19 per cent hold an undergraduate degree and 28 per cent hold Certificates and Diplomas. No post-school qualifications are held by 16 per cent of the respondents. The qualifications and experience held demonstrate the respondents' business knowledgeability.

Other demographic data collected shows that the respondents were predominantly male, with one female respondent being the 3 per cent exception. The majority of respondents were over 50 years of age. Table 6.5 summarises the respondents' characteristics in terms of seniority, experience, highest formal qualification attained and age.

Table 6.5   Respondents' characteristics

Criterion	Category	No.	%
Seniority	**Reporting lines**		
	Report to Board	8	25%
	Report to Global CEO	3	9%
	Report to Australian CEO	3	9%
	Owns business	6	19%
	Reports to owner	2	6%
	Report to another senior manager	10	31%
Experience	**Years in senior manager's role with current organisation**		
	10 years and over	17	53%
	7-9 years	2	6%
	4-6 years	5	16%
	1-3 years	6	19%
	Less than 1 year	2	7%
Post-school qualifications	**Highest qualification attained**		
	Postgraduate	11	34%
	Degree	6	19%
	Diploma/Certificate	9	28%
	Other	1	3%
	School-leaver	5	16%
Age range			
	60 years and over	6	19%
	50-59 years	15	47%
	40-49 years	7	22%
	30-39 years	4	13%

Source: Items A1, D3, D4 and D5

Additionally the high level of responsibility of the respondents is evident when describing their daily activities in Item A1. For example *Int.L003* is accountable for Australia, New Zealand and assets in China and *Int.S004* for all activity in Australia. All respondents were involved in their organisation's strategising and collaborations. Their role titles, reporting lines, qualifications, involvement in strategising and descriptions of their daily roles demonstrate the seniority and expertise of the respondents, qualifying them as an elite group of senior managers in the Australian logistics industry, with expertise in the specific topic areas which are the focus of this research study. The respondents are also knowledgeable on the current state and concerns of the Australian logistics industry. Interviewing elites made coding processes easier as they tended to provide coherent, well-formulated responses (Aberbach & Rockman 2002). Their commentary on the Australian logistics industry as the context for the discussions on collaboration and strategic intent is presented in the next section. This is constructed from responses to questions in the demographic section of the survey. Additional anecdotal comments from unstructured questions and secondary data are also incorporated.

6.5   Commentary on the Australian logistics industry

In Australia, there are expectations that the freight task by 2020 will be double that of 2006. The development and productivity of this industry is critical to the Australian economy (Kittel & Haugstetter 2011). The Australian Logistics Council (2012) suggests its impact on the Australian economy is 14.5 per cent contribution to GDP. The industry suffers from an ageing workforce, with over 48% of workers aged 45 or over (Transport and Logistics Industry Skills Council 2013). Despite

apparent opportunities for interaction and collaboration, recent research highlights low levels of collaboration in the logistics industry in Australia (Storer & Hyland 2011; Torugsa 2011). Despite its national significance, the industry is described by respondents as '*unevolved*' (*Int.L012*) and '*archaic*' *(Int.S001)*. Observations from the respondents contribute to understanding industry issues that affect strategic decisions to collaborate and invest in knowledge creation and transfer leading to innovation. These are elaborated in the following sections, beginning with the levels of competition.

6.5.1 Levels of competition

The Australian logistics industry is characterised as being highly competitive (KordaMentha 333 2012). This characterisation is strongly supported by 70% of respondents (Item D2). High levels of competition are creating an industry with low returns, for example KordaMentha 333 (2012) suggests 6.2% is the average profitability, with pressure on price evident. Price cutting is a way of gaining business (*Int.M007*). However, the consequences of price competition are evident in the number of large freight businesses that have gone into receivership in the last five years (*Int. L012)*. The industry is 40% below average industry profitability in Australia (KordaMentha 333 2013). Respondents noted the low profit margins (*Int.L001)* and heavy investment in expensive fixed assets requiring long-term returns (*Int.L003*). Together these factors create an industry which *Int.L002* describes as '*very unforgiving, there's not a lot of margin for error because there's not a lot of profit margin*', which makes it both '*challenging*' and '*very cost sensitive*' (*Int.S004)*. The low returns exacerbate the loss of skills in an aging workforce, which affects the number of apprenticeships offered and young people employed

(*Int.L002*). The prognosis for scope for funds being available for investment in the future is lacking. In this financially tight environment, collaborating within the industry may be an appealing strategic option as it is a cost-effective way of gaining access to new knowledge.

6.5.2 Dynamism

Besides being competitive, 31% of respondents described the industry as being dynamic, with change being a constant (Item D2). The dynamism affects the way they do business (*Int.L002*) and the landscape in which they operate (*Int.L005*). Losses in manufacturing industries in Australia are having a flow-on effect, with logistics organisations losing business. Three years ago manufacturing comprised 60% of *Int.L002's* business, which has now disappeared. Internal infrastructure alterations are forcing changes on some organisations (*Int.L011*).   More infrastructure change is forecast by *Int.S003*, who suggests that infrastructure is lacking in Australia. He expects a hub to be developed in Singapore or Asia in the near future to service Australia due to '*our high cost of wages and to a degree our productivity*'. Changing consumer habits are also contributing to the industry dynamism (*Int.L001*), particularly in online shopping and last mile delivery (Int.L003; Int.S002).

Another contributing factor to the Australian logistics industry's dynamism is its cyclical nature (*Int.L010*). *Int.M002* reflects that '*at the moment, the industry is going through a tough time, a challenging time for us*'. Some organisations are clearly focused on survival (*Int.M012*). There were positive views that some sectors and businesses were performing well in the current environment. For example

Int.M005 acknowledged that the effect of constant competition and dynamism in the industry is positive. *Int.M014* pointed out that although '*it's competitive, it's growing*' a view point echoed by 9% of respondents (Item D2). The industry's dynamism is giving additional impetus to strategic decisions to collaborate to seek productivity gains and cost savings. However the industry is fragmented and divided which is counteracting such impetus.

6.5.3 Fragmented and/or divided?

With broad sectors in the logistics industry, such as transport and storage, there are niches, specialists and various approaches to business. This creates an industry that appears separate and disparate (*Int.S005*). For example, the road transport sector comprises traditional family businesses which are passed on to relatives. Such a family-focused industry creates a lack of recognition of wider-based strategic management perspectives and narrow views of the value of other contributions to the industry (*Int.S001; Int.L012*). Organisation size is also dividing the sector, with large transport organisations seen as aggressive, bullying and untrustworthy (*Int.S002; Int.L008*). Further they are perceived as achieving better outcomes with government (*Int.S002*). Divisions and complexities arise as the competitive environment varies across each state of Australia, both in terms of which organisations are operating there and the resulting approaches to competition and collaboration (*Int.L013*). The role of major players on the industry is evident by the dominance of the two major supermarket chains that exacerbate price competition (*Int.L003*) and exert indirect pressure (*Int.M003*). Given Australia's small market size, there are real risks faced by the industry, providing impetus to collaborate (*Int.M002*).

The Australian logistics industry is a good barometer for the general state of the economy (*Int.L002*). The derived nature of the industry contributes to the differences between sectors, reflecting the diverse risks that arise out of the industries it supports. For example *Int.S003* notes his organisation's growth strategies are all predicated on the growth plans of their two major clients. *Int.M007* is diversifying because of weather risks associated with rainfall in agriculture. Yet *Int.L003*, operating in food observes that they are 'somewhat recession proof, because everyone eats'.

Significantly the regulatory environment contributes to the fragmentation and lack of a consistent regulatory environment, for example an abundance of regulation in heavy freight and little for the last mile of delivery (*Int.L009; Int.S004; Int.l009; Int.S002*). Regulators are seen as being ineffective with an archaic foundation that is slow to change (*Int.L009*). Moreover *Int.L009* suggests that collaboration with government agencies is '*very important to move the industry forward*' but considers not all of the government departments are '*actually fair dinkum and prepared to listen and change*'. Taken together these fragmented and divided views are creating distrust, counteracting the impetus to collaborate.

6.5.4 Strategies and solutions

The dynamism and turbulence in the industry is a key factor in strategic planning that determines planning time frames and norms. A long-term view for strategic planning is taken by 69% of respondents (Item A4), with 78% of respondents giving five years or less as their long-term strategic planning time-frame (Item A12; ave 4.47yrs, median 5yrs, std dev 1.963). For example *Int.L010* comments '*what we call strategic is two to three to five years*'. Table 6.6 below summarises these planning time-

frames. This perspective on shorter-term strategic planning is prevalent amongst the respondents. The exceptions are organisations that are making heavy investments in port handling facilities or automated warehouses. For these companies the time frame is often over ten years. *Int.L004* states strategic planning '*in concrete activities its five years, but in capital planning we'd appreciate that equipment over many, many years, so its ten years plus*'. The dynamism in the industry makes a five year time frame for long-term strategy planning the norm.

Table 6.6   Strategic planning timeframes

Planning time frame	Number	Percent	Cumulative Percent
Less than 1 year	2	6.3	6.3
2 years	3	9.4	15.6
3 years	6	18.8	34.4
4 years	2	6.3	40.6
5 years	12	37.5	78.1
6-9 years	1	3.1	81.3
10 years	4	12.5	93.8
Over 10 years	2	6.3	100.0
Total	**32**	**100.0**	

Source: Item A12

Strategic management and sound management practices and principles become critical to organisations' continued existence (Green 2009). The respondents indicated a range of solutions to reduce inherent risks to the logistics industry, including diversification (*Int.M014)* and adopting a niche focus (*Int.L012).* Besides

changes to strategic positioning, other approaches adopted include agility and flexibility with the '*need to be very responsive to new and emerging opportunities*' (*Int.M010)*, echoed by *Int.M002*. Other approaches are adding value through reputation and quality *(Int.M009)* and continual improvement through cost efficiencies (*Int.M007).* Another approach that can provide access to new ideas is collaboration, a strategy that may provide resilience in turbulent times. The potential strategic benefits of collaboration for an industry characterised as competitive, dynamic and fragmented are discussed in the next section.

6.6   Collaboration

Collaboration is seen as a natural outcome of logistics by the majority of respondents as it '*compels people to collaborate*' (*Int.L004).* Collaboration is seen as implicit, '*the glue that holds us all together*' (*Int.L012*) and necessary, particularly to prevent the industry being fragmented and disconnected (*Int.M002; Int.L013*). The following section provides the contextual data from the interviews relating to collaboration, its meaning to the respondents and its occurrence. This establishes the context for the ensuing discussion on the strategic benefits of collaborating, the focus of SRQ2.

6.6.1 Respondents' perspectives on collaboration

Industry practitioners define collaboration in terms of its core purpose and the manner it is executed (Item B1). Synthesising their responses, the Australian logistics industry's definition of collaboration is *working together for mutual benefits, with a spirit of cooperation*. The core purpose of collaboration was a key component of the definition for 66% of the respondents, which included all the large organisations,

35% of the medium organisations and 60% of the small organisations. This suggests that large organisations are very focused on collaborating to achieve a common goal. Further, it indicates that the small and medium organisations are more focused on the way of doing business together. The purpose was expressed with comments such as '*working to a common objective*' (*Int.L006*) and '*to find a solution or develop a solution collectively*' (*Int.L011*). The manner of execution was included in their definition by 66% of the respondents, which included 38% of the large organisations, 71% of the medium organisations and 100% of the small organisations. The manner of execution was expressed with comments such as '*working together on the goal*' (*Int.M006*) and '*sharing ideas and processes*' (*Int.L003*). This would indicate that the small and medium organisations are more focused on the way of doing business together. Three of the organisations that have not collaborated in the past three years answered the question, but did not contribute a definition in their response. Generally the respondents discussed the notion of collaboration for a while before arriving at their definition, using similar words, such as mutual benefits, sharing and common purpose as part of the discussions. Five respondents clarified their definitions by comparing collaboration with competition, to distinguish the nature of the activity. For example *Int.M011* comments that collaboration is '*a general spirit of while there's competition, there's also a spirit of cooperation in some senses*'. There also appeared to be little need to have a formal, contractual arrangement in place, with only 2 respondents (*Int.S003*; *Int.S004*) saying that one is necessary. The remainder of the respondents did not mention contracts or contractual formalities as part of their discussion surrounding the definition, indicating *Int.M004*'s comment that it is '*mainly an unofficial, unwritten relationship*' represents the general view. This fits with the industry definition not including a component relating to formal, contractual

obligations. Joint decision making is not a component of the respondents' definitions, with respondents considering it inherent in the term working together. This contrasts with the academic discussion of the term collaboration, in which the joint creation of rules and structures is central.

> Collaboration is a process in which autonomous or semi-autonomous actors interact through formal and informal negotiation, jointly creating rules and structures governing their relationships and ways to act or decide on the issues that brought them together; it is a process involving shared norms and mutually beneficial interactions,

> Thomson, Perry and Miller (2007, p. 25).

For the practitioners, the creation of rules, structures and decisions relating to ways of acting were inherent in the term 'working together'. Working together encapsulates the intricacies of negotiation and decision making. For the majority of the practitioners it thus negated the need for a formal contract. In the academic discussion there is greater emphasis on the need for rules and structures. The practitioners regard this as part of the process of collaboration. Although the mutuality is evident in both definitions, the fact that there is a benefit is more apparent from the practitioners' version, perhaps reflecting that business people will only take action if there is a clearly defined positive outcome. Further Thomson, Perry and Miller's (2007) definition originated in the public sector, so there may be more concern for resolving broad-based issues than beneficial outcomes. In a sense, the practitioners have developed a short-hand for the term, which in essence is similar to the academic view espoused by Gray (1989). Collaboration is a negotiated ordering of the environment, founded on collective goals and decision making.

6.6.2 Collaboration levels

There was a high level of collaboration by the respondents over recent years. In the past three years, 88% of the respondents have been engaged in collaborations (Item B2). Of the four organisations that had not collaborated in the past three years, one had collaborated previously but it was more than three years ago, and another is a start-up business that has only been in operation for three months. Of the organisations that have collaborated, 50% had been involved in over ten collaborations and nearly a third in more than 20 collaborations in the past three years, which is summarised in Table 6.7 below, indicating they are experienced in

Table 6.7 Number of collaborations

Number of collaborations	Number of respondents	Percent	Valid Percent	Cumulative Percent
1-5	9	28.1	32.1	32.1
6-10	5	15.6	17.9	50.0
11-15	5	15.6	17.9	67.9
>20	9	28.1	32.1	100.0
Total	28	87.5	100.0	
No collaborations	4	12.5		
Total	32	100.0		

Source: Item B3

collaborating. Government is a principal type of entity with which collaborations are occurring, representing 15% of the collaborations (Item B4). However, there is no one type of organisation that dominated.

There was an expectation amongst 66% of the respondents that the level of collaboration in the Australian logistics industry will continue to increase over the next ten years (Item B23), as shown in Table 6.8. There were 22% of the respondents expecting that the level of collaboration would stay the same, which included 40% of the small companies. Only 9% considered that the level of collaboration was likely to decrease in the Australian logistics industry. There was one small company that felt unable to predict what was likely to happen, giving the 'Don't know' response.

Table 6.8 Expected changes to the number of collaborations, next 10 years

Expected change	Number	Percent	Cumulative Percent
Increase	21	65.6	65.6
Decrease	3	9.4	75.0
Stay same	7	21.9	96.9
Don't know	1	3.1	100.0
Total	32	100.0	

Source: Item B23

Industry consolidation and competitive forces were the perceived main drivers of change by 34% of the respondents. There was a consensus amongst these respondents that there is a cyclical nature to the industry, where consolidations occur and then competitive pressures force other companies to collaborate to compete for business. *Int.M010* noted that with such consolidation and competition, collaboration was necessary to '*build a high performing sustainable business*'. Costs savings and

efficiencies were given as the main drivers of change by 16% of respondents, for instance *Int.L005* comments it is getting harder '*to get any further advancement in efficiency'*. Other reasons given included changes in government regulation, increased outsourcing, and a growing attitudinal change to the value of collaboration such as *Int.S004* thinking there is '*an accelerating awareness of the value of collaborative business*'.

6.6.3   Commitment to collaboration

There is a positive commitment to collaboration as a strategy (Item B5). Table 6.9 below summarises that on a scale of 1 (low commitment) to 10 (high commitment), 72% of respondents rate their commitment as 5 or more to collaboration as a strategy. Two thirds of respondents rated their commitment as an 8 or higher (*mean 7.25, std dev 2.68*). Such commitment is reinforced by comments such as '*we could not do the business without collaboration*' (*Int.M009*).

Some respondents had difficulties assigning a value to their organisation's commitment to collaboration (Item B5), predominantly because they considered that internally different parts of the organisation held different attitudes to collaboration.

Within their organisations are varied levels of commitment within the management hierarchies. For example *Int.L007* observes that although senior management can conceptually see the value of collaboration to the business, on a daily basis diverse

Table 6.9 Strategic commitment to collaboration

Commitment to collaboration	Number	Percent	Cumulative Percent
1.00	1	3.1	3.1
2.00	1	3.1	6.2
3.00	3	9.4	15.6
5.00	4	12.5	28.1
6.00	2	6.3	34.4
7.00	1	3.1	37.5
8.00	6	18.8	56.3
9.00	7	21.9	78.1
10.00	7	21.9	100.0
Total	32	100.0	

Source: Item B5

managers and supervisors are interacting '*with people who have been here for 20-25 years where it hangs, in fairness, in a space with competitors, collaborators and combative customers where that's not easy to do*'. The reality of aligning internal attitudes is the responsibility of senior management, but implementation is less easy.

All the 29 respondents whose organisations have collaborated in the last three years regarded them as successful (Item B11). The recognition of the strategic value of collaboration is evident with 84% of respondents regarding collaboration as a strategy to achieve their long term strategic intent (Item B7). The respondents valued collaboration highly, for example it is '*part of our strategic aspirations' (Int.L004)*. However there were differences amongst the groups, based on organisational size. Of

the large companies, 92% regarded collaboration as a strategy to achieve their long-term intent, as did 100% of the small organisations. The medium organisations were less supportive, with 71% indicating that they regarded collaboration as a strategy to achieve strategic intent.

Figure 6.1   Commitment to collaboration and strategic intent
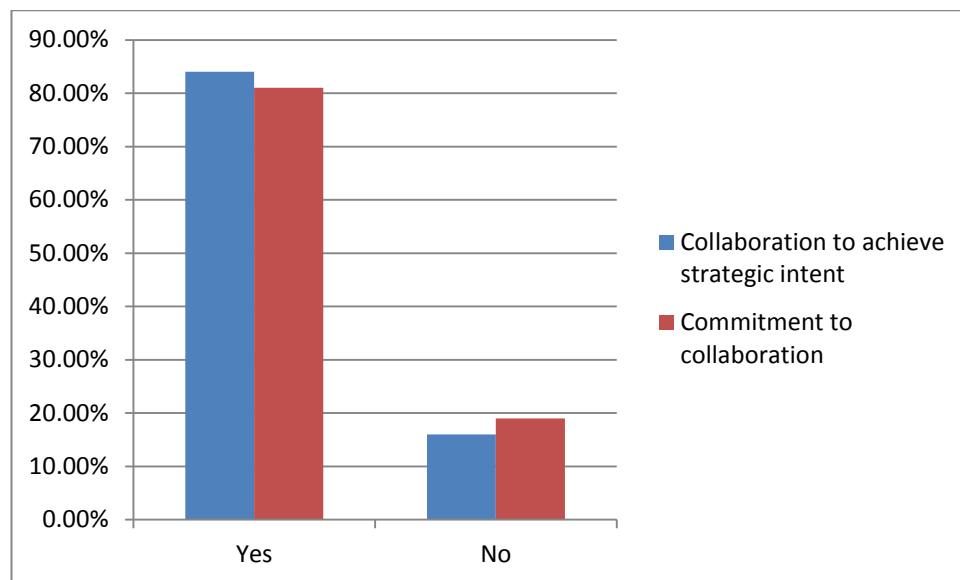
Sources: Items B5 and B7

Figure 6.1 shows the relationship between the collaboration to achieve strategic intent and commitment to collaboration. When commitment to collaboration is high, there is also a strong belief in collaboration as a strategy to achieve an organisation's strategic intent. Overall this suggests that the respondents have had positive outcomes from their experiences, further encouraging them to regard collaboration as a potential strategy.

Having established the industry context and strategic commitment of the respondents to collaboration, its potential strategic benefits are investigated next to address SRQ2. Included in this subsequent section are the enablers of collaboration. It concludes by linking both the strategic benefits and the enablers to the industry definition.

6.6.4 The strategic benefits and enablers of collaboration

The strategic benefits of collaboration are the primary focus of SRQ2.

SRQ2: What are the potential strategic benefits of forming collaborations?

There is strong support for the positive benefits of collaborating amongst the respondents. For example, comments included that collaboration '*facilitates our business model' (Int.L004)*, '*helping us achieve our strategic goals' (Int.M011)* and is of strategic value because '*the sum of the parts is greater*' (*Int.L001).* The strategic role of collaboration was discussed when respondents were asked to outline why they entered into their most recent collaboration to indicate the strategic drivers to collaborate (Item B13). The respondents' view of why they consider collaboration is a strategy to achieve their organisation's strategic intent is also included (Item B8). Combining the responses to these two questions with anecdotal material enabled the respondents' view of the strategic benefits of collaboration to emerge though the coding process. Their responses to Items B13 and B8, plus the anecdotal materials are summarised in the next section.

6.6.3.1 Strategic role of collaboration

The initial coding was conducted by extrapolating five categories from the responses (Appendix H, Item B13). The five categories are grow business; financial; customer; access resources; and other. Some respondents gave multiple reasons for entering their most recent collaboration, such as '*cost and service*' (*Int.L002*). Additionally three respondents had not collaborated over the past three years. Due to the use of content analysis, 33 responses in total were extrapolated. Provisional coding of these 33 responses resulted in the five categories, shown in Table 6.10 below.

Table 6.10   Strategic role of collaboration

Category	Responses	Percentage
Business growth	11	33.3%
Financial	6	18.2%
Customer related	6	18.2%
Access resources	4	12.1%
Other	6	18.8%
Total response count	33	100%

Source: Item B13

Table 6.10 shows 33% of respondents considered business growth to be the reason for entering into their last collaboration. Financial and customer related reasons ere the next highest categories. These responses are evenly distributed when comparing responses by company size (Appendix H). Provisional coding was then undertaken in

NVivo, to identify any text throughout the interview transcripts that indicated drivers of collaboration and strategic benefits. This text was then recoded utilising the five categories developed in Table 6.10, plus the literature review, in an iterative process of eclectic coding (Saldaña 2013). Part of the process involved collapsing sub-categories together if there were insufficient responses. For example, cost savings and efficiencies were mentioned by four respondents. Cost savings as a category was then merged with business growth as a theme. Similarly accessing new ideas, new technology or creating innovation was detailed by four respondents and subsequently merged with enabling solutions as a theme. This process resulted in three themes, namely business growth, enabling solutions and way of doing business. Appendix L contains the themes, the sub-themes that were developed in NVivo and some examples of quotes from the interviews. Collaboration as a strategy enables business growth. Growth arises through networks for future business and growing business from existing customers. Enabling solutions is often linked to business growth. However enabling solutions has a stronger focus on the customer and business retention through loyalty. *Int.L003* notes '*within the collaboration we're looking for the best solution that we will get but also our partners will realise [benefits]*'. Similarly *Int.L001* indicates collaboration '*allows us to put a better solution together*' for their customers by working across multiple divisions within the organisation, creating synergies that positively affect customer perceptions about potential best outcomes. The way of doing business for example adds quality of life for employees, managers and suppliers as '*ultimately they would rather work for someone that they thought was not going to screw them at the first opportunity*' *(Int.L012)*. Throughout the coding process it was apparent that the strategic drivers and strategic benefits associated with collaboration were intertwined. The strategic

drivers and strategic benefits were difficult to separate in a consistent, thematic way. It appears from the practitioners' commentaries that similar to the literature, strategic drivers can become strategic benefits and vice versa over time and with retrospective views. Regardless, collaboration creates associated strategic benefits.

Table 6.11   Summary of classifications for strategic role of collaboration

Key component of definition	Exploit and/or explore	Strategic role themes and sub-themes
Working together for mutual benefits	Exploit and explore	Business growth - growing business - financial
	Exploit and explore	Enabling solutions - customer focused - increase knowledge/ research
	Exploit and explore	Way of doing business - mutually supportive - partnering

Collaboration creating strategic benefits fits with the first part of the definition developed from the practitioners' views of collaboration, namely working together for mutual benefits. Classifying the themes with the ambidexterity categories of exploit, explore or both, the classification in Table 6.11 is developed. From Table 6.11 it can be seen that it is difficult to categorise the themes as either exploit or explore. For instance in the theme enabling solutions is a sub-category of increasing

knowledge and undertaking research, which is exploring, yet it also contains enabling solutions which is exploiting the existing customer base. SRQ2 has identified that the potential strategic benefits of collaborating are business growth, enabling solutions and a way of being. The above discussion highlights how intertwined the strategic role of collaboration is with the outcomes of collaboration. The linkages emphasise that there are strategic benefits of collaboration. The definition of collaboration developed from the practitioners' views connects the perceived mutual benefits as a strategic rationale for entering into a collaborative venture. The next section continues by investigating the enablers of collaboration.

6.6.3.2 Collaboration enablers

The top factors that ensure a successful collaboration indicate factors that are important (Item B9). (Refer to Appendix M.) A weighted index was constructed from the responses. The respondents' most important factor is weighted with a value of three. Their second response is weighted with a value of two and the third with a value of one. Both the weighted responses and the simple count of responses were summarised and collated. Table 6.12 summarises the outcomes. There is a small difference in the percentage results from the weighted index, compared to the simple count. The weighted responses were then provisionally coded into groups reflecting the core content of the factors, with consideration of the literature review on enablers. The respondents consider that 81% of the weighted factors that ensure a successful collaboration are those associated with relationship building, interpersonal skills, business facilitation and other. These responses constitute the spirit of cooperation, part of the definition of collaboration developed earlier. This indicates the factors that ensure a successful collaboration are those associated with the

enabling conditions and can be classified as enablers of collaboration. The remaining 19% of responses are more associated with the mutual benefits of collaboration, discussed in the previous section. This may indicate that the enablers and strategic benefits are intertwined. In the business facilitation category, the sub-theme of common goals can be extrapolated in Appendix M. From this is can be seen that 11% of the enablers of collaboration are connected to the strategic intent of an organisation. This reinforces the idea that strategic benefits and enablers of collaboration are interconnected and may explain why distinguishing strategic benefits and enablers is complex.

Further analysis of the responses by the size of organisation shows that there are differences in the importance of the enablers to large, medium and small organisations (Appendix M). Large organisations place a greater emphasis on interpersonal skills and business facilitation rather than relationship building. Medium organisations stress business facilitation and relationship building rather than interpersonal skills. Small organisations emphasise relationship building more than interpersonal skills and business facilitation. Medium organisations may consider the relationship and facilitating business more important if collaboration is a central strategy to their way of doing business. However the earlier discussion showed that medium organisations were not so committed to collaboration as a strategy to achieve strategic intent. There are many possible explanations for these differences.

Table 6.12   Collaboration enablers categorised by theme

Category	Theme	Weighted value	Percentage
Mutual Benefits	Business growth	9	5%
	Enabling solutions	5	3%
	Way of doing business	0	0
	Mutual benefits	11	6%
	Other	9	5%
Spirit of cooperation	Relationship building	36	20%
	Interpersonal skills	46	25%
	Business facilitation	58	32%
	Other	8	4%
Total		182	100%

Source: Appendix M

6.8   Summary

The respondents are an elite sample drawn from the Australian logistics industry, who each participated in an extensive telephone interview. Data analysis has been conducted by mixed methods, involving descriptive statistics and qualitative analysis. The data obtained from the interviews enabled the role of collaboration to be considered in the context of the Australian logistics industry. The industry is

competitive, dynamic and fragmented. Forming collaborative ventures is thus a potential strategic solution for business growth.

The respondents strongly supported SRQ2, namely that collaboration provides strategic benefits. This may be partly because collaboration is seen as a natural way of doing business in the logistics industry. Further an understanding of collaboration was developed from the practitioners' perspective, it being working together for mutual benefits with a spirit of cooperation. The definition has two parts. Firstly the mutual benefits, which are found to be business growth, enabling solutions and a way of being. The second part of the definition focuses on the spirit of cooperation, which are called key success factors by the respondents. These factors are the enablers of collaboration, being relationship building, interpersonal skills and business facilitation.

Having established there are strategic benefits from collaboration, the next chapter focuses in particular on strategic intent and its role in knowledge creation and transfer to address the Primary Research Question. This is investigated through the two secondary research questions, SRQ1 and SRQ3, to arrive at a position to address the Primary Research Question.

Chapter 7 Findings: strategic intent and knowledge effects

7.1   Introduction

The previous chapter investigated the findings that relate to the Australian logistics industry and collaboration, providing insights into the context of the primary research question. This chapter continues the discussion and analysis of the findings, with more focus on strategy and knowledge creation. The chapter commences with investigation into the responses relating to strategic intent, the focus of SRQ1, continuing with senior managers and knowledge effects to address SRQ3. The final section integrates previous discussions to explore the study's findings related to the PRQ.

7.2   Strategic intent

Section A of the questionnaire focuses on strategising. The initial questions are designed to clarify the terminology used by members of the Australian logistics industry when discussing strategy. From that foundation, the role of strategic intent in providing direction to the organisation and the answer to SRQ1, as shown below, are developed.

> *SRQ1: Is an organisation's strategic intent considered when forming collaborations?*

7.2.1 Strategy terminology used by the respondents

When designing the questionnaire, it was decided not to define the term strategy as the participants, due to their elite status, are the experts. The initial ice-breaker question was designed to establish their daily activities, which included senior

management tasks such as determining multi-million dollar purchases, being responsible to the board for the performance of the organisation and ensuring strategy is achieved on a daily basis, the details of these responses were discussed earlier in Chapter 6. All the respondents affirmed their involvement and expertise in both strategy making and collaborating. Subsequently, they were asked for the terms they used when discussing strategy in their organisations (Item A2). The respondents replied with a variety of strategy terms, ranging from vision, mission and values, to A3 Plan and Strategy 2015. A total of 68 terms were offered by respondents as terms they use in their organisation, with many of the respondents using multiple terms. The most frequently used term is vision, being used by 63% of the respondents and constituting 29% of the total terms in the responses. Mission is the next most frequently used term, with 50% of respondents using the term. This indicates the commonality in use of these two terms. The remainder of the terms were not frequently used. There is a variation amongst respondents in regard to the number of terms used, with an average of 2.1 terms used (*range 0-6, std dev 1.40*). For example respondent *Int.M012* from a medium sized organisation, indicated there was not '*a lot of concentration on strategic planning*' and used none of the terms, whereas *Int.L002,* from a large organisation, used six of them. There was no significant correlation between the number of terms used and education levels or the size of organisation. With a similar number of large and medium sized organisations represented amongst the participants, there is a difference in the number of terms used. Respondents from large sized organisations contributed 53% of the terms used and those from medium sized organisations 35%. Further, the term vision and mission are used by 77% and 63% of respondents from the large organisations respectively, compared to 50% and 25% of those from the medium organisations.

Despite the lack of correlation, senior managers in larger organisations may have both more exposure to a wider breadth of strategy terminology and use the terms more often than managers in medium sized organisations. The small sized organisations contributed 12% of the total terms in use. There are fewer small organisations represented in the participants.

The term strategic intent is mentioned as being used by 6% of the respondents (Item A2). When asked specifically if they used the term strategic intent, 19% of respondents agreed they used the term (Item A3). The 19% comprises two respondents from large sized organisations and four from small and medium sized organisations. The understanding of strategic intent as a long-term target that guides decision making is then explained to respondents (Item A4). In response to this question, 69% of respondents stated they have a long-term target that guides their decision making. Various terms are used for that target including strategic plan, plan on a page and vision. The use of a long-term target is evenly distributed amongst the two groups of organisations. Together the responses to these Items illustrate that the term strategic intent is not widely used amongst the respondents to indicate a long-term target to guide decision making. Notwithstanding, six respondents do use the term strategic intent when talking about strategy in their organisations. These six respondents were then asked to explain what they mean by the term (Item A5). Their responses were coded and compared in NVivo. A summary is provided in Table 7.1 below. By comparing these six responses, the role of strategic intent in providing focus and direction appears common to their understanding. Strategic intent sets boundaries on activities and directions. Further it is a consistent focal point. There are similarities between these six respondents' understandings of strategic intent and

the literature (Hamel & Prahalad 1989). Of note though, is its meaning may be somewhat ambiguous amongst these respondents. *Int.L002*, when explaining his role earlier (Item A1), indicated it was partly to '*service the markets which are defined in our strategic intent or, if you like, our business plan*', which intimates that he considers that the business plan and strategic intent are the same.

Table 7.1   The respondents' meaning of strategic intent

Meaning	Relevant quotes
Boundary setting	'it's more a view about the markets we want to be in, the size we wish for in terms of revenue and sort of returns on capital employed we'd expect' *Int.L002*
Forward thinking	'future proofing our business' *Int.L003*
Focus	'10 years on that is clearly still the focus' *Int.M005*
	'strategic focus and those sort of things' *Int.M011*
Direction setting	'we look at the strategy that the business needs, to take it in a certain direction, for a certain period of time' *Int.M007*
	'more to do with, in an idealistic or holistic sort of manner, this is the direction that we think we're going' *Int.S004*

Source: Item A5

To ascertain what the respondents consider to be their highest value strategy term, they were asked about the hierarchy of strategy terms in their organisation (Item A6). Specifically they were asked about their top term and how that cascades down. For some respondents the hierarchy was very straightforward, with '*vision on top, then mission under that, then strategy under that*' (*Int.M004*). Other respondents are more ambivalent or take slightly different approaches, such as *Int.L007* having '*an aspirational target, framed first for us largely in a financial sense and secondly in an aspirational, structural sense*'. *Int.L005* places values first with '*a real commitment to service excellence and innovation for our customers*' as the overarching statement, then underneath that there are four pillars, namely '*a growth mission, a service mission, people and shareholders*'. Table 7.2 shows some of the examples to illustrate the diversity of hierarchy terms used by respondents in their strategy practices. Neither the terminology, nor the number of terms used in each respondent's hierarchy, is consistent across the participants. For instance, some respondents only use one term and so do not have a hierarchy of strategy terms.

Despite the variations in terminology shown by the responses to Item A6, there is a general sense of an overarching, longer-term target in the mind of the senior managers. This longer-term target guides the development of shorter-term plans amongst the majority of the sample. There were two respondents however who were opposed to the role of long-term targets and associated strategies. *Int.S001* observes '*we try not to get caught up too much in the word strategy*' as he believes '*it's an overused word, almost something people hide behind; a reason for not doing something*'. This observation may be related to another comment he makes later that the board is elected annually, resulting in a more short-term perspective. *Int.L009*

does not '*believe in such a target. We continually look to grow our business only when it suits us to do so*'. Underpinning this statement though is the intent to grow the organisation, confirmed by his strategy which is to be better than competitors.

Table 7.2   Examples of hierarchies of strategy terms

Sample of respondents	Their hierarchy of strategy terms
Int.L006	1. Mission statement 2. 5 year strategy 3. 1-2 year plan
Int.L011	1. Budget
Int.L012	1. 10 year position 2. A3 plan
Int.M008	1. Long-term planning
Int.M010	1. Vision=overall aspiration 2. Strategic directions 3. Strategic plan
Int.M014	1. Future target
Int.S003	1. Vision 2. Strategic planning

Source: Item A6

The context of the organisation's specific circumstance and nature of the business environment play a key role in how this overarching, longer-term target is applied. For example it may impact directly on planning horizons. A plan to list as an Initial

Public Offering (IPO) on the Stock Exchange in five years' time means that '*everything revolves around listing*' *(Int.M002)*. However fundamental to the decision to list is the strategic intent to be '*in the top 20 international logistics companies worldwide by 2020*'. Future plans and previous strategic decisions influence the time frame. The residual effects of previous strategic decisions which have created current financial pressure affect how the strategic intent is practiced. For example *Int.L011* highlights that concerns of risk and immediacy are central to their strategy. The intent is mitigating risk, by meeting commitments and achieving budget. Additionally, variations in the terminology used for strategy in practice reflect the beliefs and attitudes of the senior managers. *Int.L012* comments he has a '*ten year position*' but he prefers to keep the terminology '*down to earth*', believing '*anything that sounds too kind of high-brow automatically puts the industry people off*'. International ownership can affect cultural approaches relating to the regimentation in the process. A German parent company creates five year strategies that are renewed every five years, but may have limiting effects now. The respondent observes that currently there is '*no decision making after 2015, it all stops in 2015*', when he expects to receive a new five year plan for the period ending 2020 *(Int.L001)*. The parent company will however have a strategic intent that is ongoing beyond five year plans. The role of timeframes on strategic intent and actions can be limiting. With a focus on 2020 driving near-time mergers and acquisitions and '*business models that create more value accretion in the near-term*', *Int.L007* reflects that '*many of the actual profit moves are beyond the 2020 threshold*', which are currently ignored. *Int.S001*, working in an environment where the Board is elected annually, observes '*it does inhibit having too grand a vision, it drives things down to small chunks that can be delivered on a short-term basis*'. Regardless of the

planning horizons, the changes in circumstances or the nuances of culture, there resides a central focus that is guiding decision making.

The terminology that surrounds strategy in practice is thus not neatly ordered, nor consistent. Removing context from strategy gives only a partial picture of how strategy in practice occurs. Strategic intent is not fixed; it is fluid and evolving through a continual reassessment. What matters is what the term the respondents use means to them in terms of the actions they take. The next section investigates how information on strategic intent is provided in the public domain via the vision statement.

7.2.2 In the public domain: the vision statement

The websites of the respondent organisations provide data in the public domain, including their vision statements. By studying their vision statements the long-term perspective is apparent. For the investigation of the information, initial decisions were made to obtain consistent data for comparison. The lack of consistent information can be seen in two examples of organisation's web pages provided in Appendix N. (Neither of these organisations participated in the survey.) Firstly, the information was classified according to the headings and words used on the web page. If there was nothing labelled vision or vision statement, the organisation was deemed to not have a vision statement on the web. Secondly some of the respondent organisations form part of multinational corporations (MNCs) or are subsidiaries of major Australian companies. If a separate vision statement was not established for the respondent's business unit, it was decided to include the parent organisation's vision statement.

Following these criteria, there were 11 organisations (34%) within the participants that have a vision statement on the website, comprising 46% of the large organisations, 21% of the medium organisations and 40% of the small organisations represented in the sample. Of these 11 organisations, 64% utilised the parent company's vision statement, five are part of MNCs. However, there are also six MNCs that do not have a vision statement on the website. For the respondent organisations that are publically displaying a vision statement, 12.5% are doing so that have no connection with a large parent organisation. Both a word cloud and a word frequency count were created for this web-based information, by creating a table and then utilising NVivo (Appendix O). The word cloud provides a pictorial representation of the most common words appearing in the respondents' vision statements. Such visualisation confirms the information on the word frequency count table. To further improve the value of the word frequency count table, similar words were combined, such as solution and solutions, with the word count and percentage adjusted accordingly.

The word frequency table of the respondent organisation's vision statements show that the most common words are, in descending order, services (seven appearances), followed by global, solutions and customers, which all appear five times, and provider which appears four times. Ignoring more generic words, such as logistics and supply chain, it appears that the respondent organisations emphasise their role as service providers which enable solutions on their vision statements on the websites. In the public domain this will be to attract business. However, it also reinforces the importance to them of the problem-solving inherent in the strategic benefits of collaboration, discussed in the previous chapter. Nevertheless, the word frequency

count is significant by the words that are not included, for instance there is little mention of being an innovative organisation. One respondent organisation (not detailed to maintain confidentiality) has '*inspired innovation*' as the tag line to the vision, yet innovation or new ideas receives no further mention on the web page.

7.2.3 The strategic intent in the private domain

In the interview, respondents were asked to state their organisation's long-term strategic intent (Item A7). As discussed in the previous chapter, there are a range of time frames considered long-term by the respondents. Consequently it was decided that for the analysis of Item A7, the time frame placed on it by the respondent would be deemed long-term. In other words, the analysis relates to their long-term strategic intent, regardless of the respondents' determination of how far ahead long-term means in years. In places it was difficult to ascertain if some respondents had a strategic intent. For example *Int.L008* made a joke in response to Item A7, but subsequently in the interview he stated he wanted to keep the business '*profitable, as long as the boys want to keep doing it*'. For consistency, all responses given at any time in the interview that indicated a long-term strategic intent were included as positive responses to Item A7. Taking this approach through the coding process gave 22 stated strategic intents. These were copied into a table of stated strategic intents for study in NVivo (Appendix P).

The table of stated strategic intents enabled a word cloud and word frequency table to be developed in NVivo (Appendix O). When considering the word cloud and word frequency tables for the stated strategic intent, a different picture emerged. In the stated strategic intents, the role of the organisation as a problem-solving service

provider that was evident in the vision statements disappeared. The word frequency table of the stated strategic intents gave growth, success and leadership more prominence, particularly in comparison with those used in the public vision statements. Despite that, these words do not dominate. However, the word frequency table gives an indication of the strategic intent behind the words. Looking in detail at the phrases gives more insight. Phrases such as '*be a leader*' and '*double in enterprise value*' are more powerful indicators of growth in the strategic intent than the individual words and are present in 41% of the stated strategic intent statements. Continued success is evident in '*maintain market share*' and '*the most successful logistics provider*' in 18% of the statements. Leadership shows in desires to be a '*top 20 international logistics company*' and 'to be the market leader' in 14%.   The remaining 27% have a range of other intentions, such as risk mitigation, safe and secure service offering and positioning logistics as an attractive place to work. Innovation appears twice. Firstly, one of the freight forwarders has a strategic intent to be the most innovative. Secondly one respondent has a commitment to service excellence and innovation for clients. Further the customers are only mentioned three times. The focus of these statements is different to the vision statements in the public domain. For the statements given in the interviews, growth was the main focus, which aligns with the key strategic benefit for collaborating established earlier.

There is divergence between the perceived roles of the two different statements. For instance *Int.M003* states the strategic intent is to '*grow the business to double our size in 5 years*'. In contrast the information on his organisation's website refers to quality, being valued and respected. The latter is more likely to convey an impression to potential clients and stakeholders rather than reflecting a belief that offering

quality and such attributes will generate growth. Having established that many of the respondent organisations have a long-term strategic intent for their organisation, the next section investigates how it is disseminated internally.

7.2.4 Dissemination of strategic intent within the organisation

The strategic intent is disseminated internally by various means including strategic planning workshops, formal and informal meetings, presentations, posters and newsletters (Item A8). However amongst the sample there are mixed beliefs on the value of relating the strategic intent to employees. This may also be a contributing factor for the low percentage of respondents that have the information publically available on websites. There is a contrast in some organisations considering it important to ensure everyone in the organisation is aware of the strategic intentions and others thinking employees are not interested. If it is considered a priority, then it is more likely to be publically displayed. For example *Int.L003* has induction courses for all new employees and takes steps to substantiate that all employees are fully aware. *Int.L007* indicated that he placed little value in '*expressing ten year goals to employees*' preferring to direct their attention to one-to-three year goals and publically expressed target operating ratios. *Int.M006* considering the employees '*in the logistics side*' are '*generally not interested in the long term goal*' being more interested in daily targets. *Int.L011* was keen that employees not know the current focus on risk mitigation and earning adequate returns as it may be '*a demoralising factor*'. Having established the context for strategic intent within an organisation's strategising, the next section addresses SRQ1. There is again a divergence between the information that is presented in the public domain and the strategic intent of the organisation.

7.3   Strategic intent and collaborations

In the previous chapter, it was found that collaborative ventures were formed for the purpose of achieving strategic benefits. Of interest to this thesis is whether such strategic actions are purposeful, in line with the strategic intent, or opportunistic. The discussion in this section is to address SRQ1.

> *SRQ1: Is an organisation's strategic intent considered when forming collaborations?*

To address this question, it is first established if long-term strategic intent influences respondents in their strategic decision making practices (Item A9), how involved senior managers are in the strategic decision to collaborate (Items A1 and C1) and if collaboration is seen as a strategy to achieve the long-term strategic intent (Item B7). Additionally the regular practices of reassessment are considered to show the significance of strategic intent and its interaction with decision making.

7.3.1 Strategic intent provides a frame of reference

Over 90% of the respondents agreed that strategic intent influences them in their daily practices (Item A9). There were many initial remarks similar to *Int.M007*'s '*definitely, definitely, yes most definitely*' in response to this question. The long-term strategic intent functions as a '*reference point*' (*Int.M005; Int.S001*), which then is constantly running in the back of the mind when making strategic decisions. Strategic intent thus operates as a frame of reference, giving direction and providing boundaries. *Int.L011* explains that knowing '*where the organisation's going in the*

logistics space', he can then ensure that '*the decisions I make or influence take that into account*'. Knowing where the organisation is headed is critical to their decisions and actions, because that is how they know what is in the best interests of the organisation. This may involve '*a short-term change in strategy to achieve a long-term outcome*' (*Int.L005*). Moreover '*it helps you decide on things not to do*' *Int.L012*.

Besides its role in providing direction and creating boundaries for decision making and actions, respondents also highlighted the role of strategic intent in creating alignment. For example it has guided organisational restructures to align intentions and outcomes (*Int.M010)* and, by providing a common focus, connects large, disparate business units in an organisation (*Int.L006).* Such alignment includes customers, so the organisation is not committing resources to servicing the needs of potential new customers that are not in its best long-term interests *(Int.M005; Int.M014).* Moreover strategic intent influences hiring decisions (*Int.L012; Int.S001)*. Strategic intent then creates alignment and guides actions, providing senior managers with a frame of reference. Three respondents were not convinced that they consider the long-term strategic intent as part of their strategic decision making. This may have been due to a perception that long-term is over ten years from the definition given (Item A4), or that their planning cycles are five years, or not recognising that five years is the norm for long-term amongst the respondents. Overall then, the respondents strongly supported the significance of the long-term strategic intent and its influence on their strategic decision making as a frame of reference, guiding actions and alignment.

To further assess the importance of collaboration as a strategy to senior managers, the respondents' level of involvement in the phases of a collaborative venture were explored (Item C1). When asked if they would be involved at the initiation of a collaborative venture all respondents agreed, reinforcing previous information (Item A10). In the majority of cases the senior managers being interviewed are directly involved, particularly in the establishment and winding-up phases. Usually collaborations begin with senior management involvement, before being '*rolled out to the operations*' (*Int.L013*) for the on-going phase. Such involvement is perceived as being critical to achieve the desired results. This indicates that the respondents understanding and knowledge of the strategic intent is being brought to bear on all significant discussions as a collaborative venture is being established.

For further investigation of the variables collaboration as a strategy to achieve long-term strategic intent and strategic commitment to collaboration, the respondents were divided into several groups. This is to investigate if there were any significant differences between different sized organisations, managers with different levels of experience, age and education of these variables. The initial data was collapsed, creating groups of two for organisation size (combining small and medium organisations to compare with large), length of experience (seven years or more experience as a senior manager in the current organisation as very experienced compared to less experienced with six years or under), tertiary educated (school-leavers + certificates or diplomas compared to tertiary qualified or higher) and maturity (more mature being 50 years and older, younger being 49 years of age or less) (Esteve et al. 2013). The differences between groups was then explored with the Mann-Whitney U Test (Pallant 2013; Tabachnick & Fidell 2007). For both the

variables, collaboration as a strategy to achieve strategic intent and strategic commitment to collaboration, the Mann-Whitney U Test showed no statistically significant difference between these groups, similar to Esteve, Boyne, Sierra and Ysa (Esteve et al. 2013) (refer Appendix Q).

Strategic intent influences the senior managers in their daily practices. It provides a frame of reference that they use as a guide for decision making to achieve the organisation's long-term strategic intent. Further, it ensures alignment between components of strategy implementation. Moreover, all the senior managers are involved in the establishment phase of a collaborative venture. Additionally from the earlier discussions in Chapter 6, Figure 6.1, there is strong support amongst the sample for collaboration being viewed as a strategy to achieve their long-term strategic intent, with no statistically significant difference between groups. Consequently it is found that that SRQ1 is strongly supported. An organisation's strategic intent is considered when forming collaborative ventures. The next section investigates the nature of strategic intent further.

7.3.2 Reassessment of strategic intent

Over time the long-term strategic intent is reassessed by 94% of respondent organisations (Item A14), except for those two previously mentioned with fixed contracts and planning regimes. Of the respondents who reassess the strategic intent, 83% do so annually or more frequently, such as quarterly, as shown in Table 7.3.

Table 7.3　　　Frequency of reassessment of strategic intent

Frequency of reassessment	Number	Percent	Cumulative Percent
>1 year	12	37.5	40.0
Every year	13	40.6	83.3
Every 2 years	2	6.3	90.0
Every 3 years	1	3.1	93.3
Every 4 years	1	3.1	96.7
That depends	1	3.1	100.0
Sub-total	30	93.8	
Non-response	2	6.3	
Total	**32**	**100.0**	

Source:　　　Item A16

The strategic intent is reassessed by these respondents principally due to external circumstances because '*sometimes you're hit by influences you have no control over*' (*Int.L002*), such external influences include the advent of a new, major competitor into the market space (*Int.L004*), changing 'economic conditions' (*Int.L010*) or 'carbon pricing' (*Int.L002*). These influences can be felt indirectly, such as the parent company changing its focus from growth to return on capital to reflect changing global conditions (*Int.M011).* Further short-term goals, milestones or metrics are reassessed regularly against some form of longer-term plan. *Int.M002* for instance talks of '*a roadmap for each year and a five year roadmap*' which they review quarterly with a day away '*to go over the financials*'. The key factors that are reassessed and their ranking are shown in Table 7.4. Respondent *Int.M008* stated that

due to the nature of their business the organisation only reassessed training due to compliance requirements. All respondents reassessed all items listed (Item A17), except for one respondent who only reassesses training and education due to its importance to the organisation and one respondent did not reassess the performance indicators. Additionally 31% reassess other factors, which include emerging markets, cash flow and career planning for staff. These are mainly external factors that have a particular importance for the organisations. Overall this suggests their influence on strategy in practice is strong. Yet when asked the importance of factors for reassessment (Item A17), external factors were ranked equal third as shown in Table 7.4 below. External factors have the smallest standard deviation, indicating that there is convergence amongst the sample on the value of their importance.

Table 7.4   Ranking of importance of reassessed strategy components

Ranking	Strategy element	Number	Mean	Std. Deviation
1	Resources	31	4.29	1.07
2	Process	31	4.26	.89
3	External	31	4.16	.69
3	Capability	31	4.16	.73
5	Education	32	3.91	1.38
6	Performance Indicators	30	3.73	1.17

Source: Item A17

Respondents are asked for examples of key elements of the external environment that are considered in their reassessment processes in (Item A18). Generally they discuss the macroenvironment factors such as the economy, the regulatory environment and

what is happening in their market. Knowing that an organisation's strategic intent is continually in the respondents' minds, changes in the external environment are therefore an important influence on it. The fluid nature of strategic intent in practice can be seen in the interplay between the changes in the external environment and the frequency of its reassessment. This indicates two key aspects of strategic intent. Firstly, with a permeable boundary strategic intent is influenced by changes in the external environment. Secondly it shows that factors that may affect an organisation's strategic intent are continually researched and reassessed by organisations in the Australian logistics industry. This reassessment process suggests that the capabilities of the senior managers include ambidexterity. By regularly reviewing and managing resource allocations, processes, external factors and capabilities, the senior managers continually evaluate and align them as they simultaneously reassess the strategic intent. However, although ambidexterity facilitates exploration, new ideas and innovation were rarely raised as strategic benefits of collaboration by the respondents, despite their value in the competitive and dynamic marketplace of the Australian logistics industry (Green 2009; Transport and Logistics Industry Skills Council 2013). The following section investigates the role of strategic intent and knowledge creation and transfer further. The discussion reflects both the academic terminology and the terms used in the telephone interviews, following the pre-testing process. Namely knowledge creation is referred to as new ideas and innovation and knowledge transfer as learning when reporting the findings from specific questions.

7.3.3 Long-term strategic intent and new ideas and learning

Collaborative ventures are likely to be rich sources of new ideas and innovation due to the high level of interactivity that is occurring. A strong link between strategic intent and collaboration as a strategy would indicate that collaborations are prized as sources of new ideas and innovation. Yet that was not seen as reason to collaborate by the respondents, nor does it form an obvious part of their strategic intent statements. With such support for the central role of strategic intent in senior managers' thinking and practices, its role in knowledge creation and transfer is perhaps less certain.

However 81% of the respondents considered that the long-term strategic intent provides direction for the development of new ideas and learning in the organisation (Item A10), which is strongly supported by their explanations (Item A11). For example, one organisation links its annual Innovation Masters Award (IMA) to the strategic intent, leading to a regular stream of innovations from employees that are subsequently supported by senior management commitment (*Int.L010).* However *Int.L010* did not indicate the use of the term strategic intent earlier in the interview. This also shows an important role for strategic intent in motivating employees when the reward is clearly aligned to it.

The development of new ideas and learning are not necessarily detailed in strategic intent but appear more indirectly. It is as if developing new ideas and learning is unstated, but understood, a given, always sub-consciously in the back of respondents' minds (*Int.L007*). *Int.L002* explains that forward planning for an opportunity includes thinking '*around the people, the equipment, the measurements*

and the assets you need to work it through'. Again, having a long-term view guides '*the sort of people you might want to bring into the organisation'*. Seeing part of the strategic intent to be innovative and work smarter, constant research is occurring (*Int.L005).* Yet the stated strategic intent refers to increasing the organisation's value. For *Int.L004* the connection is clear cut as funds are not released for projects unless they link clearly to the strategic intent. Long-term transformational goals form the basis for senior managers' thinking and planning, indicating the value of long-term strategic intent to the development of new ideas and learning.

Despite these positive responses, there were some more cautious replies. Although agreeing in principle, the connection was seen as being more indirectly linked to strategic intent. For example one respondent considers it affected new knowledge and learning by the desire to be an employer of choice (*Int.L001*) and for guiding training needs, for instance if a new warehouse is being considered (*Int.S003).* Further one small organisation considered many new ideas arise from their own managers (*Int.S004).* The alignment of strategic intent with people skills, training and education needs may not be so advanced in the respondents' thinking yet as opposed to more obvious, direct links with, for example, resource commitments. This may be why the importance of education and training was ranked as 5 in Table 7.4. As *Int.L013* remarks, '*you'd like to think so, but perhaps we don't think we've quite got to that level yet'*.

Another explanation is that improvement is a continuous cycle of incremental innovation. It is far less easily observed as a change. New ideas and learning underpin continuous improvement, but are not so easily perceived. *Int.L009* for

instance suggests that the organisation's strategic intent, although not explicitly mentioning growth, includes the growth of new ideas. The organisation operates on a continuous improvement cycle, noting '*new ideas come out on a regular basis to improve the way we do that task'* for the customer. There is a continual cycle of change and inclusion of new ideas.

Additionally, the permeable boundary may make it difficult to separate the effect of external changes from the business ecosystem on new ideas and learning (*Int.L003).* The continual cycle of interactions with customers, suppliers and other entities creates new learning in the industry, through technology rather than because it is guided by strategic intent (*Int.L008*). The permeability of organisational boundaries may thus be adding complexity when trying to distinguish direction arising from the strategic intent and that from external changes when strategising. Every time the strategic intent is reassessed it is incorporating incremental changes in the external environment. Strategic intent is thus fluid and dynamic. To add further insights to these complex issues, the following section further investigates the role of strategic intent on absorptive capacity, addressing SRQ3.

7.4   Strategic enhancement of absorptive capacity

Absorptive capacity is necessary to capture new ideas and knowledge as they occur, enabling assimilation into the organisation through its routines. SRQ1 established that strategic intent is involved in the formation of collaboration. With collaboration a source of new ideas and innovation, SRQ3 seeks to better understand the relationship of strategic intent to the development of absorptive capacity. This is necessary to capture the knowledge effects of collaboration. SRQ3 is detailed below:

SRQ3: Is absorptive capacity strategically developed to enhance knowledge transfer and creation in collaborations?

Given that this research is partially focused on knowledge creation and transfer, it has been noticeable by its absence in these data discussions to date. There has been little mention of innovation, apart from appearing in some stated strategic intents. Furthermore, education and training was ranked fifth of six categories in terms of importance, as shown in Table 7.4 above, and access to new ideas or learning were not drivers of the decision to form collaborations. Section C of the survey, which is focused on knowledge creation and transfer, contributes some indications of why this silence appears to exist. These are explored further in the next sections. Firstly the respondents' absorptive capacity is explored, through their own further development, education and experience.

7.4.1 Senior managers' development

Of the respondents, 56% have had no personal development to help with collaboration in the past five years (Item C4). Age and experience may be contributing factors, with many of respondents being mature age, and perhaps thinking that they are '*too old*' to do any more education and/or training (*Int.M012*). Or, more simply, '*the company assumes I can do it all*' (*Int.S004*). The organisations have required 16% of respondents to undertake some form of further training or education to help with collaboration (Item C5). Developing the absorptive capacity of the respondents to assist with collaboration is not therefore seen as a priority.

However of the 44% of respondents (Item C4) who have undertaken formal or informal staff development, the majority have found the knowledge gained helpful in the practice of collaboration, particularly informal activities with their peers such as industry round-tables. Generally it has helped with perspective, communication, relationship management and the practicalities of collaborating. For example *Int.M007* notes that '*you learn more by listening than talking*' when sitting with your peers or other businesses, a view similarly expressed by *Int.L003* and *Int.M006*. Staff development has enabled improved translation of the challenges and desired outcomes of collaborations amongst all parties involved, leading to better results (*Int.L010).* Internal benefits are also noted in working with peers, collaborating with the directors on the board and training the next generation of managers (*Int.L005; Int.M010; Int.L012*). Broadening their understanding of contractual matters and modern risks were also given as positive outcomes of their personal staff development. Such development occurred through company-run leadership courses, membership of Industry Roundtables and business coaching for instance. Mixing with their peers and undertaking courses provide benefits, yet there remain prevailing negative views amongst the respondents on the value of education. For example, *Int.L001* states '*all the people in our industry don't have any formal level of education*' and says it will not be any different in five years' time. The level of education and experience among the respondents is reported in the demographics earlier in Chapter 6. Another way to increase absorptive capacity is through experience.

7.4.2 Significance of experience

There were many anecdotal remarks made throughout the interviews about the value of learning by experience over education, besides the specific responses to Item C4. Through the coding process in NVivo, these were incorporated in the same nodes. Respondents indicated that the '*school of hard knocks*' (*Int.L013*) is more important than formal education. For instance *Int.M001* indicates he better understands '*what needs to be achieved out of a collaboration to make it work*' from his past experiences. In contrast *Int.M002* '*hired university graduates to stay ahead*' because he '*could see that experience alone wasn't enough to carry through to the boardroom*'. From his own experience he had found a lack of education, at times, made communicating at board level more difficult.

With learning by experience regarded as significant by many of the respondents, it is not surprising that they demonstrated a strong view of the importance of learning to their organisation (Item C9). Learning to improve operational processes was seen as the most important, with collaborations providing learning opportunities as least important, as shown in Table 7.5. This may indicate that the tacit knowledge is being recognised.

Table 7.5   Importance of learning within the respondent organisations

Ranking	Statement	Mean	Std Dev
1	Learning to improve operational processes	4.53	.81
2	Learning to improve service quality	4.47	.72
3	Developing new ideas key to achieving strategic intent	4.41	.95
4	Learning key to competitive advantage	4.38	.61
5	Learning for organisational survival	4.34	.90
6	Collaborations provide learning opportunities	3.78	.94

Source: Item C9

The relationships amongst the above variables were investigated using Spearman Rank Order Correlation Coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a large, positive correlation between two variables, $rho = .68$, $n = 32$, $p < .00$, with high levels of learning to improve service quality associated with high levels of learning to improve operational processes. Given that the respondents operate in service organisations, this is to be expected. There was a medium, positive correlation between two variables, $rho = .46$, $n = 32$, $p < .01$, with medium levels of learning to improve service quality associated with medium levels of learning for organisational survival. Again, this is to be expected given the nature of the service industry in which they work. There was a medium positive correlation between two variables, $rho = .43$, $n = 32$, $p < .01$, with medium levels of developing new ideas to

achieve strategic intent associated with collaborations provide learning opportunities, considering the earlier discussions of findings, this is of interest. It indicates that the respondents are associating the development of new ideas with collaborations. Mann-Whitney U Tests were conducted for each of the variables in Item C9 based on the groups for experience, tertiary qualifications, maturity and organisational size (refer Appendix Q). There is no statistically significant difference in the scores for each of the groups. This indicates that the opinions expressed above in Table 7.5 do not vary by any of these factors.

7.4.3 Ways to share senior managers' learnings

The respondents share their learning from collaboration in similar ways (Item C8), principally through '*normal, everyday interaction*' (*Int.L004*). Respondents hold a mix of both formal and informal meetings regularly, from daily to monthly. *Int.L011* for example holds '*fortnightly forums with our leadership team*' to '*share learnings, outcomes and discussions that we currently have*' and *Int.M006* utilises open plan offices to help share verbally. Additionally there are training sessions, bulk emails (*Int.M006*) and committees, such as continuous improvement and workplace health and safety, which the respondents attend (*Int.M007*). Informal mentoring and coaching can occur in keeping with the collaborative spirit in the organisation *(Int.S004)*. These ways of sharing are predominantly informal, with little formal collation of the shared outcomes; the tacit is being made explicit. The knowing processes of engaging and becoming are apparent.

7.4.4 Activities for staff development that help with collaboration

Absorptive capacity within the organisation can be increased with education, training and staff development activities. Besides sharing the senior managers' learnings, there are other activities that can be undertaken to assist with staff development that will help with collaboration. Eight potential activities are detailed in Item C7, with an opportunity provided to add to the activities that help with collaboration. Amongst the participants, 44% of respondents undertook no additional activities to help with collaboration. The additional activities of the remaining 56% are shown in Appendix H, including their importance. These additional activities have a similar theme of staff development and have been developed into a table in Appendix R. This table illustrates that the majority of additional activities of value in collaboration are staff up-skilling, motivating staff and ensuring that hiring decisions are right in the first instance. This indicates that staff development is considered central to collaborations by the respondents. Of note is that no respondents considered education and training of staff directly here, with the exception of *Int.M012* who is required to update staff qualifications for compliance. Similarly 75% of respondents did not expect staff involved in collaborations to have a specific level of formal education (Item C3), and none of the respondents stated formal qualifications as a skill set of interest (Item C2). The latter may be due to an expectation that people associated with collaborations have the qualifications already as part of their existing, functional roles.

Undertaking various activities for staff development to help with collaborations is of importance to the majority of respondents (Item C7). However, not all organisations undertake all of the activities. Table 7.6 summarises the number of respondents

undertaking each activity, ranked by the percentage of those undertaking it who regard it as very important or important. The frequency tables of these results and their summary descriptive statistics are in Appendix S.

Table 7.6   Ranking of staff development activities

Ranking	Activity	Number of respondents undertaking activity	Percentage regarding activity as very important/important
1	Mentoring or coaching	30	90.7%
2	Holding internal meetings	32	87.5%
3	Recalling and sharing events	29	81.3%
4	Rotating staff	24	75.0%
5	Mixing with collaborator's staff	29	62.5%
6	Attending external meetings	30	59.4%
7	Attending industry conferences	27	56.3%
8	Internal newsletters	25	53.2%

Source: Appendix S

From the summary descriptive statistics, the values have a positive skew and kurtosis. These values indicate there is a risk that the variance is underestimated (Tabachnick & Fidell 2007). The Kolmogorov-Smirnov test of normality shows the Sig. value of less than .05 for each activity, indicating there is not a normal distribution.

Mentoring or coaching is considered the most important for staff development to assist with collaboration by the sample. The least important is internal newsletters. Fewer respondents undertake the activity of having internal newsletters also reinforces that result. Internal meetings are held by all respondents but are not regarded as being as important for collaboration as mentoring. This is possibly due to meetings having multiple functions within the organisations. Recalling and sharing events is also seen as being of importance to staff development to help with collaboration.

Most respondent organisations undertake a large number of the activities for staff development to help with collaboration, as shown by Table 7.6 above. Such activities develop staff skills directly through mentoring and coaching or in meetings for example. Staff skills are also developed by rotating through different departments within the organisations. By ensuring such staff development occurs, the respondents are enhancing the level of absorptive capacity in their organisations. The respondents themselves have increased their own absorptive capacity through staff development and their extensive experience of collaborating. The research indicates that absorptive capacity is strategically developed to enhance the benefits from collaboration. There is a focus amongst the respondents on strategically developing the absorptive capacity more by experience than by education and training. This reflects the respondents' view that learning by experience is more important than education and training.

Further this suggests that organisational ambidexterity is being developed by the respondent organisations. The coordinating mechanisms in place enhance the

connectedness of staff and enable free flow of information (Sheremata 2000). Holding meetings with staff from different departments, coupled with rotating staff and mentoring, improve the environment for personal relationships to develop, which enables ambidexterity. The high level of involvement of senior managers in these activities brings the strategic intent and the coordinating mechanisms together (Gibson & Birkinshaw 2004).

7.5   Strategic intent and knowledge effects in collaborations

There is strong support in this research study that respondents in the Australian logistics industry found positive benefits of collaborating as discussed in Section 6.6.4. Collaboration creates strategic benefits, encouraging senior managers to utilise them increasingly, with the number of collaborations expected to increase in the Australian logistics industry. The strategic role of collaboration is identified by respondents as business growth, enabling solutions and as a way of doing business in answer to SRQ2. Section 7.3 addresses SRQ1, where it is found that strategic intent is used as a frame of reference for decision making and influences the daily practices of senior managers. Further, strategic intent is reassessed frequently by the respondents. SRQ3 relates to the linkage between strategic intent and the development of absorptive capacity in the organisation. Findings indicate that respondents strategically increase their organisation's absorptive capacity through staff development, predominantly by broadening opportunities for learning through experience and sharing knowledge. Increasing absorptive capacity better enables an organisation to exploit knowledge creation and transfer (Zahra & George 2002). Collaboration incudes social interaction in which knowledge effects occur (Hardy,

Phillips and Lawrence 2003). Consequently any knowledge creation and transfer occurring in collaborations in the respondent organisations will be better able to be exploited. The findings thus far emphasise the strategic importance of collaboration, the nature of strategic intent and its connection to absorptive capacity. Bringing these findings together, with analysis relating to the respondents' learning enables an answer to be suggested to the primary research question, which connects strategic intent and knowledge effects in collaboration. The primary research question is:

PRQ: Does strategic intent contribute to knowledge creation and transfer in collaborations?

It has already been shown that the respondents are involved in knowledge dissemination within their organisations in Section 7.4.3. Besides being visible in the continual improvements that are occurring, as discussed in Section 7.3.3, the knowledge effects of collaboration are evident in the learning of the respondents. These are discussed in the following sub-sections.

7.5.1 The respondents' learning from collaborations

The respondents' own learning from collaboration is of interest as it demonstrates the knowledge effects (Items B16 and B17). Focusing on the respondents' most important lesson learned from their previous collaboration (Item B16), and the changes that occurred due to the learning (Item B17), enables the knowledge effects of collaboration to be identified. Anecdotal comments throughout the interview provide additional insights. The key responses to Item B16 and 17 have been categorised using NVivo into the themes developed in Chapter 6, with additional

input of anecdotal commentaries. These themes relate to the strategic benefits of collaboration and the enablers (Appendix T). From this table, it is apparent that the majority of the learning arising from collaboration relate to the enablers established earlier. For example the respondents identified gains in relationship building such as the role of trust, and interpersonal skills, for instance negotiation skills. The importance of openness and transparency was stressed, such as the importance of being '*upfront about what we're after and why*' (*Int.L006*). The value of research to better generate an understanding of the collaborator's business model was also identified as a key learning that had occurred. There were three respondents who consider that they had not learnt anything new from their last collaboration. These were all experienced collaborators.

It is possible that learning more about the enablers of collaboration is less likely to be noticed as a gain in innovation, being more similar to the continuous improvement of practices. Incremental improvements may be less recognised by practitioners as they form part of their daily activities and that of their teams. Moreover they may not be connecting the strategic value of collaborations for the development of new ideas and knowledge creation with incremental improvements. The correlation found earlier when investigating Item C9 (Appendix U), identifies that developing new ideas to achieve strategic intent has a medium level of association with collaborations providing learning opportunities. The correlation indicates that the potential for learning opportunities arises in collaborations. Further, there are positive knowledge effects arising from collaborating (Appendix T).

7.5.2   Actions taken by respondents

The respondents showed that higher-order learning had occurred (Argyris 2004). The respondents identified their subsequent actions following their lessons learnt from collaboration (Item B17). With the majority of the learning related to the enablers of collaboration, the lessons learnt are similarly based in the enablers. For example, the importance of key relationships is recognised and the subsequent need to build on them to capitalise on their inherent advantages (*Int.S003*). Developing stronger relationships with the equivalent senior managers was also recognised as a lesson learnt (*Int.L001*). The need to put more resources into the preparatory work of collaboration, such as gathering accurate data, getting the detail right in the first place and being clear on what is not known were all seen as positive lessons learned (*Int.L005; Int.L012; Int.L011*). This would indicate that training in research, negotiation, conflict resolution and communication skills may be valuable. Further, the importance of clarity in what the collaboration was expected to achieve and openly establishing each organisation's goals are seen as key outcomes from participation. Higher-order learning has occurred through the lessons of collaboration.

Predominantly these lessons learnt in collaboration are all building the experience levels of the respondents to better enable more successful collaborations in the future. The knowing is accumulating in forms such as know-how, know-what and know-who, which are all identical at levels of both the organisation and the individual, being comparable to learning outcomes (Bergh 2008). A central issue appears to be that the learning outcomes are not necessarily being codified or transferred to others in a formal sense. The capture of the learning outcomes for

future collaborations is being built into experience, not recorded in a formal manner for future access. Further, the valuable learning that is occurring may not be effectively transferred. There is little discussion of organisational improvements by the respondents that have arisen from their learnings in collaboration, such as implementing new processes, apart from noting the collecting of more research. It may be that because the respondents were heavily engaged in the interviews, they were interpreting the question from their personal perspective. Additionally, the multilevel nature of the concepts involved may be increasing the complexity of categorising the improvements between the individual level and the organisation. Regardless, the knowledge effects of collaboration and the increase in the absorptive capacity of the senior managers are evident.

The senior managers continually consider the organisation's strategic intent in their daily activities. An organisation's strategic intent is an important consideration when forming collaborations (SRQ1). Forming collaborations leads to strategic benefits, such as business growth, enabling solutions for customers and as a way of doing business (SRQ2). Strategic intent provides a frame of reference and assists in aligning decisions and activities for strategy implementation. Further strategic intent provides a basis for the development of absorptive capacity to ensure that any knowledge creation and transfer from collaborations can be recognised and assimilated (SRQ3). As senior managers pass their learning on throughout the organisation, for example through interactions with their staff, this thesis finds that strategic intent contributes to knowledge creation and transfer in collaborations.

7.5.3 Conceptual contribution

The primary conceptual contributions of this thesis are derived by developing an evolutionary perspective of the concepts involved, namely strategic intent, collaboration and knowledge creation and transfer, by drawing on the general management literature across disciplines. This perspective enables wider boundaries to be applied to these concepts (Mertz & Anfara 2006). Linkages and similar understandings in the diverse literature and in data collection can be observed. This has enabled further elaboration of the key concepts and their interdependencies to be established. These are all multilevel concepts. Thus to summarise these relationships, two diagrams have been developed (see Figures 7.1 and 7.2). To better view the interdependencies and relationships, the multilevel nature of the concepts is not included in the diagrams. Figure 7.1 shows the relationships of the concepts modelled in this thesis.

For a collaboration involving two organisations for example, each organisation has individual strategic intent. The collaboration is therefore the overlap of two organisation's strategic intents, the nexus. Together the organisations are seeking strategic benefits, which are not necessarily identical. As this thesis found, each organisation's strategic intent affects the collaboration through the strategic benefits sought. There is an arrow showing this linkage from strategic intent to the collaboration for both organisations.

Figure 7.1   Co-evolution of strategic intent and absorptive capacity
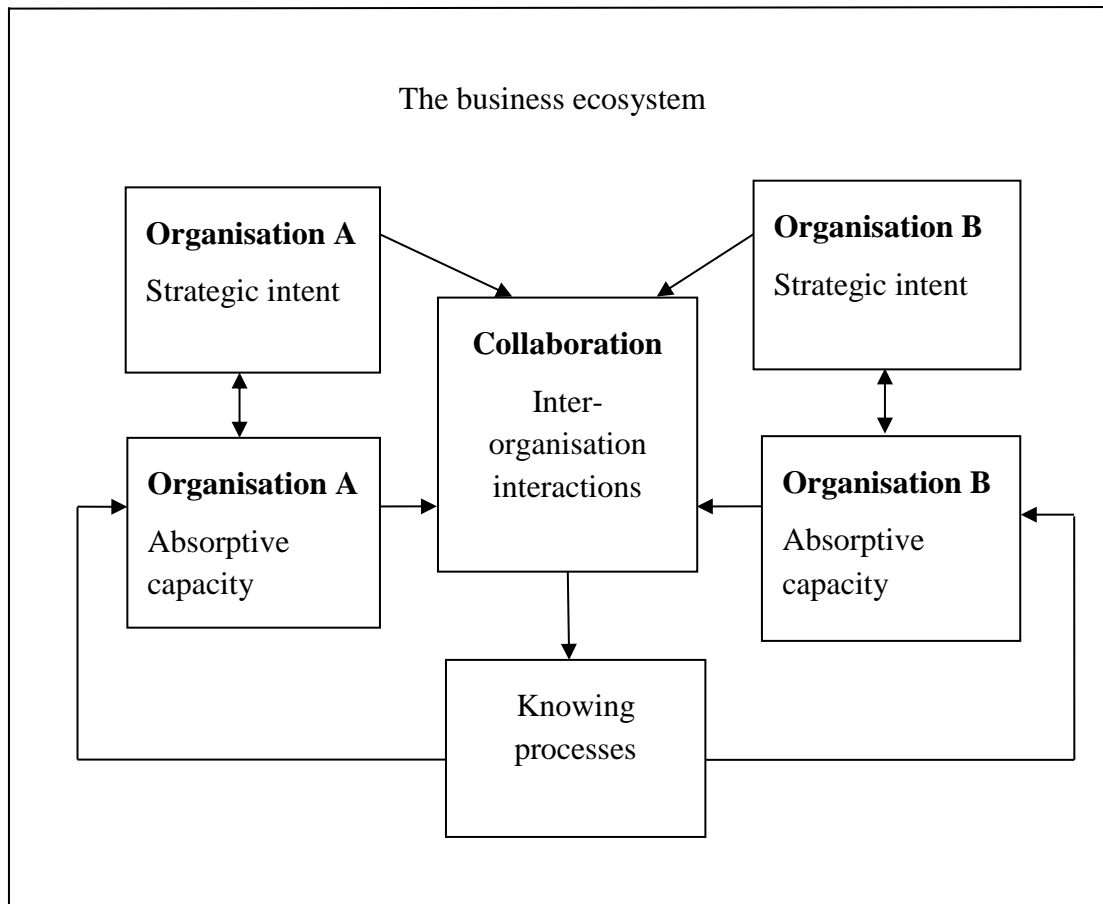
The interaction effects occurring in collaboration yield knowing, through the processes of knowledge creation and opportunities for transfer, shown in the diagram with an arrow leading to knowing processes. This knowledge creation and transfer was found in this thesis when senior managers interacted with their staff, through mentoring and in meetings for example. Whether such opportunities for transfer are recognised and utilised depends on the significant role of absorptive capacity in each organisation to these processes. The arrows from knowing processes therefore go back into each organisation via its absorptive capacity. This occurs, for instance, when staff gain new insights from the knowledge transferred from the senior

managers, or through continual improvement of organisational processes. Moreover there is a reciprocal relationship between strategic intent and absorptive capacity, an interdependency shown by the double headed arrow. As an organisation's strategic intent evolves over time, the absorptive capacity is simultaneously changing. For example, senior managers make decisions on training and education for their staff to help achieve the organisation's strategic intent. Knowledge creation and transfer from collaborations adds to the organisation's absorptive capacity as staff skills are increased, for instance when the new knowledge is assimilated by knowing, and actions are taken. The changes in absorptive capacity are thus also affecting the collaboration, for example through the development of staff skills for those staff involved. Figure 7.1 above depicts these connections and interdependencies.

Secondly, the understanding derived from this thesis and Figure 7.1 enable a revised model of knowing to be created, demonstrating a benefit of adopting a wide perspective, drawing from the general management literature. Jakubik (2011) developed her model of how knowing occurs in an organisation, which was shown in Figure 4.1, in Chapter 4. This model focused on the knowledge processes that occur as knowledge flows around an organisation. The model develops the links between know-what, know-how, know-why and future knowledge as it translates through the people involved. Knowing is a continuous process of engaging and becoming (Jakubik 2011). However knowing occurs in a context; this thesis finds that absorptive capacity and strategic intent are integral to the context. Both the development of absorptive capacity and the process of knowing are guided by the organisation's long term strategic intent; it gives a frame of reference to these processes. By enabling connections across concepts that have tended to develop

separately in the literature, an adaptation of Jakubik's (2011) knowing model is developed and presented in Figure 7.2.

Central to Jakubik's (2011) model are the knowing processes. In Figure 7.2 they form part of the organisation's absorptive capacity processes. This reflects that absorptive capacity is integral to the knowing process. Knowing and absorptive capacity are interdependent. Central to the diagram is the box representing absorptive capacity and the knowing processes.

Figure 7.2   Model of strategic intent, absorptive capacity and knowing
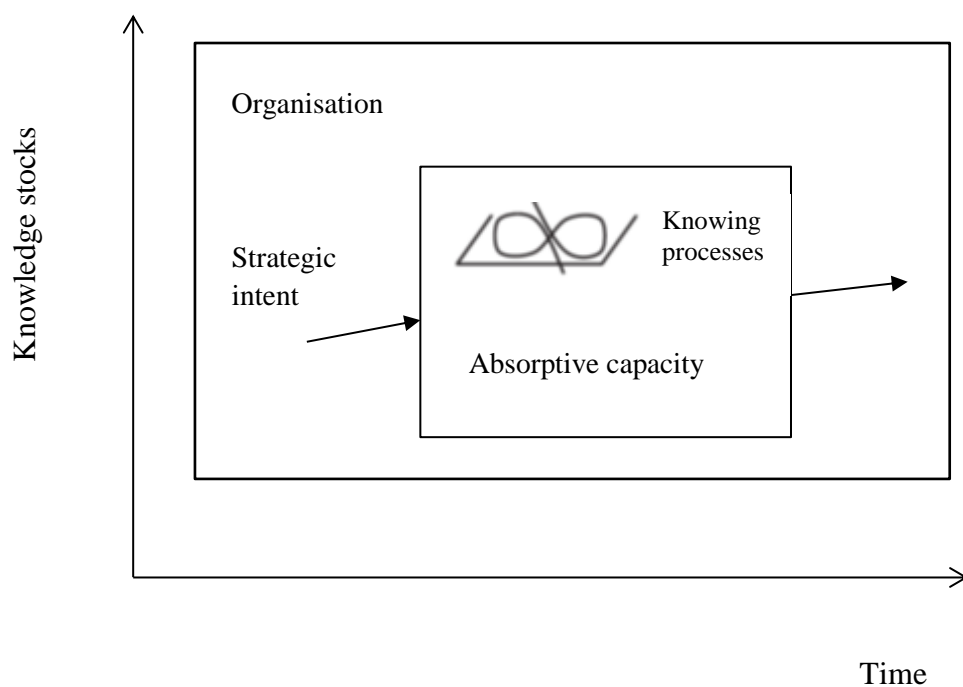
Source: adapted from Jakubik (2011, p. 391)

Within an organisation, the levels and importance of absorptive capacity are derived in part from the organisation's strategic intent. When the strategic intent includes access to innovation and new ideas, for example when forming a collaborative

venture, the absorptive capacity will be further developed. In Figure 7.2 the strategic intent is shown providing a direction in which knowledge stocks are increasing. As the knowledge stocks increase through flows of knowledge and growth in absorptive capacity, they will then affect strategic intent, which is shown appearing from the absorptive capacity. This iterative process shows that strategic intent provides a frame of reference for the knowing that is occurring. Developing absorptive capacity to achieve an organisation's strategic intent is therefore an important element of creating a sustainable organisation.

7.6   Summary

The data analysis of this chapter has investigated the role of strategic intent and knowledge effects. Strategic intent was found to provide a frame of reference and enable alignment within the organisation. Both these capacities are necessary when an organisation is considering establishing a collaborative venture. Strategic intent is thus important to the formation of such ventures. An outcome of a collaborative venture is positive strategic benefits. Strategic intent, through its roles as a frame of reference and enabling alignment contributes to strategy implementation.

Further, strategic intent provides a basis for the development of absorptive capacity. By providing a platform for the knowing to occur, absorptive capacity is the mechanism by which knowledge creation and transfer from collaborations is recognised and assimilated into the organisation. Two conceptual models have been developed to demonstrate these processes that are occurring. The respondents in this thesis demonstrated that they transmit their learning throughout the organisation, albeit in varied ways and by different amounts. Knowledge arising in collaborative

ventures is created and transferred. Moreover the respondents have a continual awareness of the organisation's strategic intent, which is reassessed. The respondents, senior managers, are one of the links connecting the knowledge creation and transfer occurring from collaborative ventures to their own organisations. By reassessing strategic intent with changes in the business ecosystem, establishing the activities to guide knowledge translation within the organisation and being themselves involved in collaborative ventures, this thesis found that strategic intent contributes to knowledge creation and transfer in collaborative ventures.

Chapter 8 Conclusion & Limitations

8.1   Introduction

This thesis has explored strategic intent and its significance to the development of knowledge in the interactive environment of a collaborative venture. This concluding chapter summarises the purpose and value of the research study and identifies its key findings, which are contextualised in the Australian logistics industry. Additionally it explains the potential limitations of the study before identifying possible areas for future research.

8.2   Purpose and value of the research

The Australian logistics industry is a significant part of the national economy. Amidst expectations that the freight task in Australia will double by 2020, there have been recent calls for more collaboration in the industry. Collaboration in the industry is seen as necessary to improve productivity and innovation (Green 2009; National Australia Bank 2012; Transport & Logistics Industry Skills Council 2013). Research on collaborative ventures has tended to focus on technological areas, primarily relating to manufacturing industries and international business. Therefore a need exists to better understand collaboration's role in creating sustainable businesses in an industry of national significance. Critical to that understanding is improved clarity about the strategic benefits of collaboration and their potential contribution to productivity gains and innovation. A strategic benefit that can arise in collaborative ventures is knowledge creation and transfer, which arises from the interactions between the organisations involved. This is also a focus of this thesis as it is the knowledge creation and transfer that enables continual improvement in collaboration.

The purpose of the research was to explore the role of strategic intent on the knowledge creation and transfer that can occur in collaborative ventures in Australian logistics networks. Strategic intent provides the guidance and direction to an organisation (Hamel & Prahalad 1994). However, the concept as discussed in Chapter 2, is little researched. Further, the key concepts underpinning this research, namely strategic intent, collaboration and knowledge creation and transfer are the focus of research activities across many disciplines, both within management and others such as philosophy. Diverse research interests have resulted in literature that is equally distinct, but with little cross-pollination (Easterby-Smith & Prieto 2008). In the multidisciplinary world of business, it is difficult to offer practicable advice to senior managers if only providing unidimensional solutions. Thus a key interest of the thesis is how better understanding of these study areas can potentially inform senior managers. The purpose is to contribute to 'the dual objectives of applied use and advancing fundamental understanding' of the role of strategic intent in knowledge creation and transfer in collaborations (van de Ven & Johnson 2006, p. 803).

A particular contribution of this research is the comprehensive literature review. The review is an important step in clarifying the complexities evident in the terminology associated with strategic intent, collaboration and knowledge creation and transfer. Exploratory research is intended to provoke further reflection for theory development. With many diverse disciplines interested in these critical business areas, the resultant terminology in the literature was exposed as varied and still developing, with little cross-pollination of ideas or frameworks. In particular there

appears to be gaps between academic research in these areas and the daily practices of senior managers.

This thesis has provided the perspectives of an elite group of senior managers into these concepts and the coopetitive networks that are being formed. From their responses, an understanding has been developed of the strategic benefits of collaborating, namely business growth, enabling solutions and as a way of doing business. Further, they have clarified that collaboration is working together for mutual benefits, with a cooperative spirit. The respondents explained that each party gained new knowledge from their participation in collaborative ventures and transferred that knowledge into their organisations for its benefit. Such collaboration can occur with government, customers, suppliers and competitors. A key element of the knowledge transfer is the absorptive capacity to recognise and assimilate new knowledge, which can be increased by strategic decisions with respect to staff development. Staff development processes that assist with the knowledge transfer from collaboration within the organisation were principally found to be mentoring and coaching, holding meetings and recounting stories to facilitate collaboration.

Utilising mixed methods for this exploratory research provided both qualitative and quantitative data for the study. A benefit of this is it encourages the use of multiple paradigms, which is a key consideration with the multi-theoretical literature involved in this study. It also enables both inductive and deductive thinking to be applied in the research study. Additionally, the research used telephone interviews to access the senior managers. Accessing an elite group of 32 senior managers in the Australian logistics industry provided in-depth interviews, with an average duration of 51.25

minutes. The duration demonstrated that the managers were engaged in the topics under discussion. It also indicates that conducting telephone interviews with elite groups is an appropriate and worthwhile approach. With a response rate of 18.7%, despite utilising an advance letter and confirmatory telephone calls, further research into accessing elite groups of business people is warranted. The additional contextual data contributed by this mixed methods research is of value to better understanding the complexities faced by the industry's senior managers, which is a further contribution of this research study.

The key theoretical contributions of this research are as follows:

- The use of a multi-theoretical approach grounded in an evolutionary perspective to provide broad understanding of the concepts from a wide array of general management literature. The key theories studied related to knowledge creation and transfer, collaboration and strategic intent in the context of the resource-based view and dynamic capabilities;

- Development of the model of strategic intent, absorptive capacity and knowing, adapted from Jakubik (2011);

- Demonstrate the value of telephone interviews and mixed methods when adopting an evolutionary perspective and studying dynamic capabilities, which is a methodological contribution;

- Added to the limited empirical research into strategic intent and confirmed its role as a frame of reference for senior managers, identified that it is continually evolving, and that it contributes to knowledge creation and transfer in collaborative ventures;

- Provided evidence that knowledge creation and transfer are occurring in collaborations and are a strategic benefit; and

- Clarified the concept of strategic intent and provided insights into its dynamic effects on absorptive capacity, knowledge creation and transfer.

The key managerial contributions of this research are as follows:

- The identification of strategic benefits of forming a collaborative venture in the Australian logistics industry, particularly the knowledge effects;

- That knowledge creation and transfer occurring during collaboration can improve the enablers, thus facilitating improved outcomes of both current and future collaborations;

- Adaptive leadership to effectively manage exploitation and exploration, co-create knowledge, manage emergent learning and appropriate new opportunities for innovation and thus resilience are all critical in the modern business ecosystem;

- Investment in training and education to improve key skills necessary to collaboration, such as communication and negotiation, are required to achieve better outcomes;

- The value of mentoring and meetings to disseminate the knowledge created in collaboration; and

- The clarification of the role of strategic intent, its fluid nature and how it differs from vision, to facilitate effective usage to achieve organisational outcomes.

8.3   Summary of results

The thesis has explored the complex concepts of strategic intent, collaboration and knowledge creation and transfer in the Australian logistics industry. The elite sample of respondents demonstrated that the term strategic intent is little used in the industry, with vision being more common. Emphatically though, the role of strategic intent as a frame of reference, guiding action and creating alignment is significant to their strategic decision making. In senior managers' daily practices, the role of strategic intent enables interplay between the business ecosystem, absorptive capacity and knowledge creation and transfer. This differs from vision, which is more value-infused. Vision has a different audience, including employees and stakeholders. Strategic intent contributes to the effective achievement of long-term organisational aspirations, by being a frame of reference and facilitating the alignment of strategy implementation for senior managers. This research supports that strategy making and refinement occurs on an everyday basis, but questions if it is unreflective (Chia & MacKay 2007). The frame of reference provides a point for reflection. Strategic intent enables daily choices that impinge on an organisation's sustainability between exploit and explore to be made mindfully, demonstrating that the senior managers are ambidextrous.

The interplay is evident in the strategising the senior managers bring to collaborative ventures. The senior managers view collaboration as a strategy to achieve their long-term intent. Their understanding and knowledge of the organisation's strategic intent is an integral part of the development of the collaborative venture. Such commitment to the strategy and their heavy involvement in the initial stages of such ventures

ensures that the organisation's strategic intent becomes part of the venture. The respondents collectively consider that collaboration is working together for mutual benefits, with a spirit of cooperation and envisage collaboration will continue to increase over the next ten years in the Australian logistics industry. The key strategic benefits of the increasing collaboration are business growth, enabling solutions and a way of doing business. The latter is seen as both being vital and an opportunity, adding quality of life to all involved and creating mutual benefits. The positive strategic benefits of collaborating contribute to the high levels of collaboration amongst the sample's stakeholders.

Critical to the success of collaborative ventures are the enablers of collaboration, which add the spirit of collaboration to the anticipated mutual benefits in daily practices. The key enablers are relationship building, interpersonal skills and business facilitation. These encompass commitment, reciprocation, trust and communication in addition to aligned values and common goals. It is partly through these aligned values and common goals that the strategic intent is brought into the black box of collaboration, but is also disseminated by senior managers to other staff involved, or potentially involved, in collaborations.

The participating senior managers in the sample meet regularly with their staff, to share their learning and maintain the spirit of cooperation in the context of collaboration. Staff development is seen as being critical to assist collaboration, with mentoring or coaching as the most important practice. Besides holding meetings, recalling and sharing stories within the organisation are also seen as important activities. Such coordinating mechanisms foster the organisation's ambidexterity.

The significance of personal interaction to collaborative ventures, the sharing of senior managers' learning and the dissemination of strategic intent is demonstrated by the consequence the respondents ascribe to these specific practices.

What is apparent from this research study is that strategic intent appears to be a fluid, evolving concept. Continual reassessment of strategic intent occurs as part of the senior managers' strategy practices and circumstances. These are woven into the strategic intent through its temporal boundaries. Strategic intent is seen as a frame of reference for the next five years in the Australian logistics industry, reflecting the industry's dynamic and competitive nature. This contrasts with the more usual understanding of its time-frame expressed in the literature being ten years.

8.4   Limitations of the study

This exploratory study has investigated knowledge transfer and creation in the Australian logistics industry by undertaking a snapshot of collaboration. Research studies require trade-offs to ensure completion, which can develop limitations of the study. There are a range of adaptive behaviours that the respondent organisations are probably exhibiting that cannot be captured. The interpretation of its findings is dependent on the constraints imposed by the study's limitations. Limitations arise from the research method and the process of collection of the primary data, including the choice of respondent.

The research is limited to a small sample of respondents when compared to the population in the Australian logistics industry. Specific attempts to contact potential respondents were made following suggestions in the literature, including advance

letter, confirmatory telephone call and further email and telephone contact. The respondents will not fully reflect not-for-profit organisations, or other service industries that have a greater focus on the end-consumer, such as hospitality. The use of a key informant representing each organisation that provides self-reported data is limiting, as it is subject to biases and may not be accurate, for example due to faulty recall. Being an elite sample that has been assured of confidentiality, this risk may be reduced. Additionally the sample size reduced the options for assessing common method bias with Harman's one factor analysis. The response rate, the truncated sample and the respondents' participation in collaboration may create selection bias and threaten internal validity. Furthermore relying on retrospective reports, there is a risk that hindsight ascribes rationality where none may have existed. Although these limitations reduce the generalisability of the findings, the purpose of the research was exploratory.

Further the findings of this thesis relating to knowledge creation and transfer are hard to generalise with the focus on one service industry in Australia. Knowledge, in itself, is a complex concept. The underpinning assumptions about its nature become a further limitation of the study and its generalisability. Being drawn from the general management literature, a limitation relates to other discipline areas that could have been included, such as economics and psychology, however, many more complexities, including an extended literature review would have been introduced to the thesis.

Moreover, there is a risk in the use of operational definitions early in research. It can be difficult to escape the initial conceptualisation, which poses the risk of losing

some of the advantages of qualitative data (Johnson & Onwuegbuzie 2006). The research design process in this study considered ways to reduce this risk. Consequently, questions in the telephone survey instrument were ordered so that respondents were asked for their definitions, or usage of key terms, prior to the researcher giving operational definitions. The actual average time of the interviews of 51.25 minutes was longer than the intended 30 minutes, designed to prevent respondent and researcher fatigue. Further questions may have increased the risk of fatigue occurring and led to administrative errors or item non-response.

The use of the published website data, although valuable in itself, has offered little in the way of triangulation as it was limited in quantity and quality (Homburg et al. 2012). Further it is difficult to take the problem of causality into account with the lack of temporal information on the variables which limits the findings.

8.5   Directions for future research

A number of directions for future research can be identified from the foundation created by the exploratory research conducted in this thesis. The principal opportunities relate to providing a conceptual platform for future research, improved knowledge of the dynamic interplay of the central concepts, changing theoretical lenses and increased knowledge of the Australian logistics industry to improve innovation and profitability.

A common understanding of the fundamental concepts of strategic intent, vision, knowledge creation and transfer and absorptive capacity would provide a foundation for future analysis that could enable improved managerial practice. Currently the

broad applicability and lack of consistency across disciplines risks diverse problem-solving tools being unavailable and may prevent the emergence of new insights that encourage creative solutions or innovative ideas. Further exploratory research that enables the development of common understanding of these complex concepts may facilitate the development of best practice and enable both academics and practitioners to contribute to further advances in research.

Equally of interest is further research into the dynamic interplay between the various elements that constitute this research, including the strategic benefits of collaboration, both external to, and within, an organisation to track their interactions and effects. For example, the mutual benefits for organisations which collaborate can be further clarified and any asymmetries which emerge in such benefits identified, particularly to ascertain if opportunistic behaviour subsequently occurs. Further, hypotheses could be developed on the combined or moderating effect of environmental dynamism (Lewin & Volberda 1999) on strategic intent, business growth and the knowledge outcomes of collaborative ventures. Measurement to empirically assess such effects, verify their directions and optimise their benefits will be valuable. Looking at the effects on all parties involved in a collaborative venture could also provide insights into other factors that may amplify or moderate effects. Within the organisation, multiple levels of analysis can be included to explore the effects beyond the senior managers. Of particular interest is the dissemination of strategic intent between these levels and its subsequent impact on knowledge processes that contribute to organisational learning.

Critical to knowledge processes within the collaborative venture are the relationships therein. This thesis has supported earlier research that demonstrates the importance of relationships to collaborative ventures. Echoing Hammervoll (2009), further research into relational capability is recommended, particularly within the Australian logistics industry where collaborating is a way of doing business for some organisations. Research into key enablers of relationship management such as commitment and the development of trust may enable a collaborative approach to continue to grow in an industry that may be undergoing paradigm change to a more collaborative way of doing business. For instance within collaborative ventures with the same organisation(s) over time, the impact of trust, experience and stability of the relationships can be investigated longitudinally to highlight the impact of key aspects of enablers that may affect the value creation and exchange processes. Additionally, the different types of knowledge, such as technological and human resource management, that are created and exchanged in collaborative ventures can be investigated to better inform analysis of the benefits. The knowledge flows and learning that occurs in these interorganisational relationships needs to be mapped and measured. From such empirical research the processes proffered in the conceptual model of strategic intent and organisational knowing can be explored.

The theoretical lens, or framework, of a study creates the boundaries (Mertz & Anfara 2006). The evolutionary perspective is developing, particularly with regard to its use as a research framework. Studying the concepts that are central to this study from other theoretical lenses may be fruitful and yield additional insights, such as thinking of a collaborative venture as a complex adaptive system. Utilising mixed methods research from an evolutionary perspective to study an elite sample has

generated interesting findings that can be further explored with both qualitative and quantitative methods. For instance, this thesis has highlighted the complexities of separating strategic intent and vision. Further exploration with qualitative research with senior managers may elicit further nuances that can then be investigated with quantitative research for generalisability. Coming from an interpretivism perspective, the conversational, interactive style adopted for the interview, similarly enabled co-creation of meaning. Developing questions from another methodological perspective or adopting a different interview style may have yielded contrasting responses. A particular outcome of this research is better knowledge of the practices of an elite sample, including telephone availability. Although telephone interviews are shown to be an effective way to conduct research with these elites, the response rate was disappointing given the use of an Advance letter and confirmatory telephone call. Further research into overcoming access to business elites is a worthwhile avenue to explore. Investigating the complexities of access and nuances of interviewing business elites would be valuable to many disciplines in management research.

More in-depth knowledge of the Australian logistics industry would benefit both academics and practitioners alike. The descriptions developed in this thesis provide a platform to investigate and compare industry sectors. Such comparisons could be in terms of levels of competitive intensity, dynamism and fragmentation and their effects on individual organisations, the industry and the economy. In particular, more industry-specific research that captures the variations of cost structures and the value of the differing technology bases will be valuable in this highly competitive sector of the economy. Better understanding of the co-creation of radical innovation and continuous improvement for an industry that is very dynamic will be instrumental in

better developing its potential. Combining this with the improved understanding of the significance of strategic intent from this thesis, the impact on opportunities for innovation and business growth would add value to an industry renowned for its low margins.

Further collection of data on the age of the enterprise and the pace of growth may provide insights into the dynamics of the development of absorptive capacity. The range of questions in the telephone survey has not exhausted all potential variables and further exploratory research to help interpretation will be useful. Including multiple levels of management within organisations may uncover effects at various levels for knowledge creation, transfer, absorptive capacity and strategic intent. Having multiple respondents may provide valuable methodological contributions. Longitudinal research will also demonstrate how the variables develop and are impacted over time. Future research can further refine the items that compose the underlying concepts.

Further research topics could include:

- Empirical testing of the conceptual model shown in Figure 7.2 and its components.

- The connections between strategic intent and managerial decision making with both path creation and dependence to add insights on their interdependencies.

- Study of strategists' and senior managers' practices in collaborative ventures to investigate the interplay and effects of strategic intent from multiple parties.

- A confirmatory study that examines cause and effect between the key concepts, strategic intent, absorptive capacity and knowing, would increase understanding of their inter-relationships, including positive and negative relationships. Pertinent statistical techniques such as confirmatory factor analysis and structural equation modelling can be applied. Construct reliability can be explored and, by testing for discriminant and convergent validity, construct validity can be established.

- Replication of this research in other industries and in different cultures (Holden 2002) to investigate similarities and differences in terminology, the drivers and enablers of collaboration and the formation of absorptive capacity.

- Utilising different research approaches, such as a case study with participant observation to obtain rich data on the processes of absorptive capacity in an organisation and/or a collaborative venture.

- Undertaking a longitudinal study could provide insights into changes to strategic intent and its impact on organisation performance and continuous improvement arising from a collaborative venture.

The exploratory research reported in this thesis adds a mixed methods study to a large volume of conceptual and some empirical literature from several management disciplines, such as strategic management and inter-firm relationships. With the purpose of illuminating the role of strategic intent in innovation, knowledge creation and transfer in collaborative ventures, the thesis has raised more questions. Similar to Weed's (2003, p. 133) observation that 'most intellectual work consists of 'small' extensions of knowledge, achieved with great labor, through pushing the border of

knowledge a little further in some direction in which it was already moving anyway', this thesis has pushed and prodded several borders. By opening many avenues for future research that can inform both academe and practice, it has hopefully contributed to bridging the gap between academe and practice for mutual benefits and with a cooperative spirit.

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