BRINGING CORPORATE STRATEGY TO LIFE THROUGH FIRM-WIDE AND STRATEGIC SUPPLY CHAIN PERFORMANCE ALIGNMENT, TO PERFORM AS REQUIRED WITHIN STRATEGIC SUPPLY CHAINS

A Thesis submitted by

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ABSTRACT

Background: The corporate strategy gap between formulation and execution is an ongoing struggle, with few execution efforts aligned with strategy, contributed by a continually changing business environment, poor performance management, slow strategy execution and inadequate technology capabilities. These matters are increasing complexity for top management in corporate strategy formulation and cascading, which are key to building a world-class firm. To address this problem in practice, this research study focused on executives at B2B firms operating in strategic supply chains and identified gaps in the literature. In the *supply chain performance management* domain, there is limited research on top management's supply chain-related role and supply chain's role in corporate strategy formulation. In the *strategic performance management* domain, linkages with supply chain are unclear, and there is limited research on corporate strategy cascading. This study aims to resolve the research problem: *How do executives at top performing B2B firms in Australia form and cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains?*

Methodology: This research study develops and examines a theoretical framework through a qualitative interpretive methodology and explores the intersection of two major domains *Strategic Performance Management* and *Supply Chain Performance Management* by applying Dynamic Capabilities Theory. The research problem was dissected into two research issues to explore the sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with corporate strategy formulation and cascading to help resolve the research problem.

Findings: This research study found that top management are dedicated to *supply chain performance management* from a strategic planning perspective during corporate strategy formulation, because they know that strategic supply chain elements in corporate strategy drives value and firm growth. Using dynamic capabilities, top management incorporate strategic supply chain considerations into corporate strategy to *seize* strategic supply chain opportunities and performance objectives, by *sensing* the requirements of strategic supply chains, to *transform* the firm and strategic supply chain operations to be capable of seizing the opportunities, to gain and sustain

significant supply chain competitive advantages and superior supply chain performance. Top management recognise strategic supply chains as critical to business success, and value supply chain knowledge and expertise in the top management team as well as participation from key personnel from cross-functional areas, especially key supply chain-focused personnel. Successful corporate strategy cascading and firm-wide strategic alignment to strategy entails the development and alignment of business plans and budgets, strategic performance alignment, supply chain strategy alignment, cross-functional alignment, people performance strategic alignment (individual, rewards and teams), performance behaviour alignment and strategic supply chain alignment. Further, the findings of this study enrich the discourse on strategic supply chain performance management by supporting the view that dynamic capabilities enable executives and B2B firms to gain and sustain significant competitive advantages and superior supply chain performance within strategic supply chains.

Contribution: The findings enabled the development of a revised theoretical framework that addresses the gaps identified in the literature. This research study advances the body of knowledge of the two major domains and the Dynamic Capabilities Theory, and identifies the sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with corporate strategy formulation and cascading with a strategic supply chain performance focus. The key components of corporate strategy cascading are identified, and a definition is proposed. A key output of this research study included a Strategic Supply Chain Performance Management Framework outline as a guide for executives at B2B firms operating in strategic supply chains, which identifies the key components to formulate and cascade a corporate strategy with a strategic supply chain performance focus to achieve and sustain superior competitive advantage. A new term and definition for strategic supply chain performance management is also proposed.

Key words: corporate strategy, corporate strategy cascading, corporate strategy formulation, dynamic capabilities theory, microfoundations of dynamic capabilities, strategic management, strategic performance alignment, strategic performance management, strategic supply chain performance management, strategic supply chains

CERTIFICATION OF THESIS

This Thesis is entirely the work of Sharyn Grant except where otherwise acknowledged. The work is original and has not been previously submitted for any other award, except where acknowledged.

Principal Supervisor: Professor Jeffrey Soar

Associate Supervisor: Dr Eric Ng

Student and supervisors signatures of endorsement are held at the University.

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ABBREVIATIONS

B2B	Business-to-business
B2C	Business-to-consumer
CEO	Chief Executive Officer
CRM	Customer relationship management
DIFOT	Delivered in full on time
DIFOTEF	Delivered in full on time error free
DIFOTQ	Delivered in full, on time and with required quality
E2E	End-to-end
EDI	Electronic Data Interchange
ERP	Enterprise resource planning system
IP	Intellectual Property
IT	Information Technology
KPI	Key performance indicator
RF	Radio frequency
SLA	Service level agreement
SSCPM	Strategic supply chain performance management
UK	United Kingdom

CHAPTER 1: INTRODUCTION

1.1. Introduction

This chapter outlines the basis of this thesis. Section 1.2 provides a background to the research and an overview of the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* relevant to this research study. Section 1.3 highlights gaps in the literature and presents and justifies the research problem to be addressed by this research study; discusses the relevance of the Dynamic Capabilities Theory to this research study and presents and justifies the research issues to be investigated by this research study; and outlines the scope of the research and delimitations. Section 1.4 provides an overview of the research methodology. Section 1.5 outlines the structure of the thesis; Section 1.6 defines key terms and concepts and Section 1.7 provides a summary of this chapter**.**

Figure 1.1 depicts the first chapter and its seven sections.

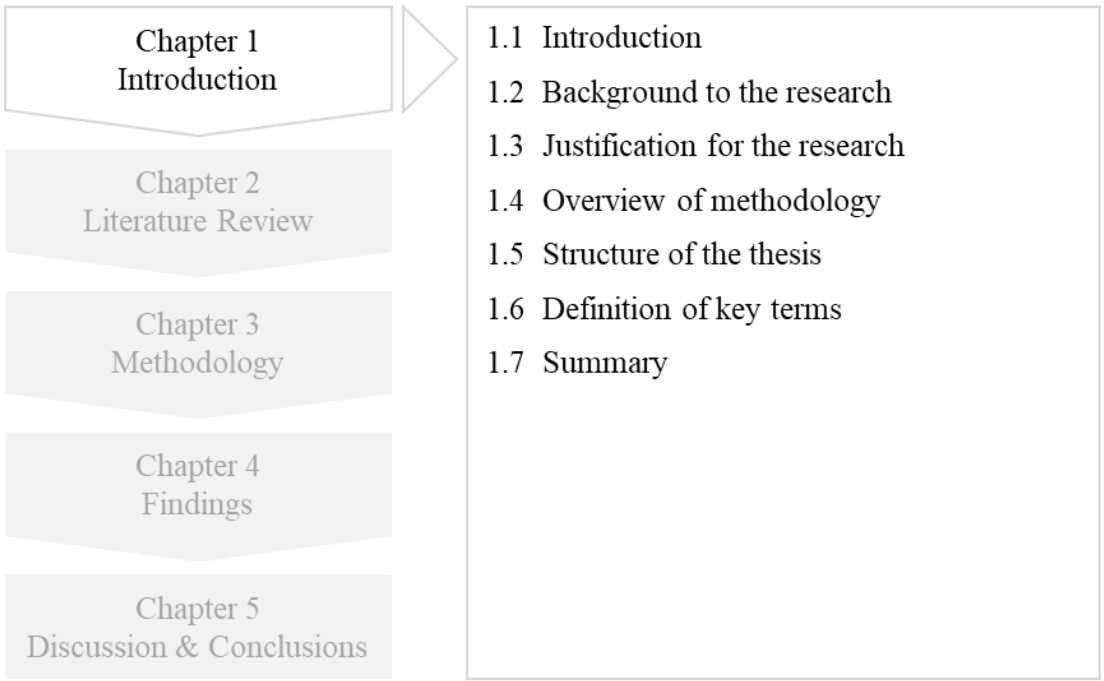

Figure 1.1: Outline of Chapter 1

1.2. Background to the research

Successful corporate strategy execution is more important now than ever before, as confirmed by 83 percent of strategists in the 2019 Gartner Strategy Execution Benchmark Survey, but ‘only 30% of strategists agree that execution efforts are

aligned with strategy' (Gartner 2020a, p. 8). The corporate strategy gap (de Waal 2013) is an ongoing struggle for firms, which occurs in between corporate strategy formulation and corporate strategy execution (de Waal 2013; Gartner 2020a, 2020b; Giordani Da Silveira et al. 2018) and is contributed by a continually changing internal and external business environment (Gartner 2020a). With competitive pressures constantly increasing, firms are in search of innovative ways to improve performance in complex supply chains that are impacted by disruptive global markets (Ramezankhani et al. 2018; Um et al. 2018; Wankhade & Kundu 2018). However, the disruptive external environment has increased the complexity of corporate strategy formulation for top management as they prepare for the unexpected (Gartner 2020c). The Gartner Strategy Leadership Council in their Gartner Strategy 2020 Agenda Poll found that strategy execution is a priority for '71% of strategy leaders', but only '12% are confident in their ability to accelerate strategy execution' (Gartner 2020b, p. 1). The Poll identified the top 10 problems of strategy leaders and found that they are least confident about solving problems relating to 'poor performance management discipline', 'slow strategy execution' and technology capabilities (Gartner 2020b, p. 1). Other challenges within the top 10 problems experienced by strategy leaders included 'strategic misalignment among executives', 'change fatigue causing disengagement with corporate strategy' and 'executives not following through on growth initiative commitments' (Gartner 2020b, p. 1). The Gartner Strategy Leadership Council report that 'successful strategy leaders' identify the ability to cascade corporate strategy firm-wide is one of the most important key corporate strategy activities 'for building a world-class organization' (Gartner 2020d, p. 1) and a firms' approach to performance management was identified as a driver for achieving a strategically aligned corporate strategy (Gartner 2020a).

The scope of this exploratory qualitative research study investigates and explores the intersection of two major domains *Strategic Performance Management* and *Supply Chain Performance Management* using Dynamic Capabilities Theory (this theory is introduced in Section 1.3.2.). This section provides a background to the research and an overview of the two major domains. Each domain plays an important role in delivering the corporate strategy and helping the firm to improve performance and achieve a competitive advantage. *Strategic performance management* is widely used to guide a firm through a continuous process of developing, redefining and

implementing the corporate strategy and controlling the firm's performance to achieve the outcomes required by the strategy (de Waal 2013; de Waal & Kourtit 2013; Franco-Santos et al. 2012; Taticchi et al. 2010; Zamecnik & Rajnoha 2015). Firms can improve organisational management, management control and operational efficiency to achieve greater cost reductions by using *strategic performance management* (de Waal & Kourtit 2013; Zamecnik & Rajnoha 2015). The definition adopted by this research study for *strategic performance management* is defined by de Waal (2013, p. 5) as:

> the process in which steering of the organization takes place through the systematic definition of mission, strategy, and objectives of the organization, making these measurable through critical success factors and key performance indicators in order to be able to take corrective and preventive actions to keep the organization on track to great performance.

Strategic performance management consists of implementing a process (Section 2.2.1) and a system (Section 2.2.3.3). The strategic performance management process can consist of sub-processes including 'strategy development, budgeting/target setting, execution/forecasting, performance measurement, performance review, and incentive compensation' (de Waal 2013, p. 5). The strategic performance management process is closely linked and intertwined with strategic management especially through the corporate strategy. Strategic management is accountable for formulating, implementing and evaluating the corporate strategy (Adler 2018; Omalaja & Eruola 2011; Zamecnik & Rajnoha 2015). The definition adopted by this research study for corporate strategy is: The highest-level overall strategy for a firm which defines the firm's vision, strategic goals and objectives (Adler 2018) and identifies markets to compete and how, and how each of its businesses or business units should be managed (De Kluyver & Pearce 2015). Typically, there are three strategic management levels of strategy formulation including corporate-level, business unit-level and functional-level (De Kluyver & Pearce 2015). Implementing the corporate strategy is a role undertaken within the *strategic performance management* domain, hence "bringing corporate strategy to life" through its extensive strategy-implementation approach.

During corporate strategy implementation, top management are relied upon to clearly explain the strategic context of the corporate strategy (De Kluyver & Pearce 2015;

Schlickel 2013). Executing the corporate strategy throughout the firm improves clarity about the firm's strategic direction (Adler 2018; de Waal 2013; Paladino 2011). No definition in the literature reviewed existed for corporate strategy cascading. The closest definition adopted by this research study for corporate strategy cascading is the 'process of vertical and horizontal deployment and alignment of an organizational strategy' (Schlickel 2013, p. 24). There are multiple ways to conduct strategy cascading including use of the Balanced Scorecard (Adler 2018; Barr 2014; Lawrie et al. 2016), value creation maps (Marr 2006), Hoshin Kanri (Chau 2008; Giordani Da Silveira et al. 2018; Schlickel et al. 2013) and the organisational structure (Adler 2018; Barr 2014). Strategic performance management systems also play an integral role in corporate strategy implementation and improving firm performance, and the technology architecture is key to this success. Strategic performance management systems increased in popularity due to advances in information technology (IT), the use of critical success factors and KPIs, the heighten importance of performance management, the need to monitor strategic processes and human behaviour, and the changing nature of the economy (Akhtar 2018). It is important that the strategic performance management system considers behavioural aspects as the negative side-effects of performance measurement and management can cause system implementations to fail, impacting achieving the corporate strategy (Bryceson & Slaughter 2010; de Waal 2013). The definition adopted by this research study for a strategic performance management system is defined by de Waal (2013, p. 27) as:

> a system in which the formal procedures that collect, analyze, and report performance information, which is used by organization members to steer and control business activities, are organized in such a way that everyone in the organization strives towards achieving the strategic objectives of that organization.

The *strategic performance management* domain is further explored in Chapter 2 Literature Review, Section 2.2. The primary topic of this research study is *supply chain performance management.* The definition adopted by this research study for supply chain is defined by García-Alcaraz et al. (2019, p. v) as 'a system of organizations, people, activities, information and resources involved in moving a product or service from supplier to customer'. In today's business environment, organisations are faced with growing demands of customers, more competition and increased pressure to reduce costs and cycle times (Stefanovic 2014). *Supply chain performance*

management is widely used by business-to-business (B2B) firms to help manage growing pressures and the performance of the supply chain. The definition adopted by this research study for *supply chain performance management* is defined by Wankhade and Kundu (2018, p. 219) as:

> the continuous process of selecting, implementing, monitoring and revising the measures and metrics to evaluate the performance of supply chain function in order to take decisions at operational, tactical as well as strategic levels particularly in aligning with [the] firm's strategy, goals and objectives.

Firms can ensure their long-term survival and outperform the competition by becoming a high performance organisation (de Waal 2018). Best-in-class firms achieve higher sales growth, higher profitability, higher asset turnover, lower supply chain management costs, have shorter cash-to-cash cycle times, hold less inventory, respond to increased demand faster and serve customers on time more often (Cohen & Roussel 2013). Discussion regarding best-in-class firms ignited interest by this research study in top performing B2B firms in Australia. Much can be learned from executives at top performing B2B firms in Australia regarding the management practices and organisational practices that lead to successful outcomes in performance and competitiveness.

Identifying improvement opportunities within strategic supply chains is a practice undertaken by strategic supply chain management, which is also responsible for developing and implementing the supply chain strategy and ensuring its alignment with the corporate strategy (Cohen & Roussel 2013; Hwang 2010; Lambert et al. 2010; Sandybayev 2017). The definition adopted by this research study for strategic supply chains is defined by Hult et al. (2004, p. 241) as supply 'chains whose members are strategically, operationally, and technologically integrated'. Strategic supply chains add significant complexity in the strategic management of B2B firms. *Supply chain performance management* is used to control and manage the complexity of the supply chain, by tracking performance against targets to identify and pinpoint supply chain improvement opportunities to support the firm's strategic objectives (Cohen & Roussel 2013; Wankhade & Kundu 2018).

This research study chose to apply an in-depth focus on the *supply chain performance management* domain as it is the primary topic of this research study which seeks to

advance the *supply chain performance management* body of knowledge. This research study chose to apply an in-depth focus on the *strategic performance management* domain as the secondary topic of this research study, due to its strong linkage with corporate strategy development, strategy implementation and firm performance, which are also significantly important to the *supply chain performance management* domain. This research study also seeks to advance the *strategic performance management* body of knowledge. The *supply chain performance management* domain is further explored in Chapter 2 Literature Review, Section 2.3. This section provided a background to the research and an overview of the two major domains relevant to this research study. The next section provides justification for this research study.

1.3. Justification for the research

The previous section provided a background to the research and an overview of the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* relevant to this research study. This section highlights gaps in the literature and presents and justifies the research problem to be addressed by this research study; discusses the relevance of the Dynamic Capabilities Theory to this research study and presents and justifies the research issues to be investigated by this research study; and outlines the scope of the research and delimitations.

1.3.1. Gaps in the literature and research problem

This section highlights gaps in the literature reviewed regarding the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* and presents and justifies the research problem to be addressed by this research study.

Strategic performance management plays an important role in developing, refining and delivering the corporate strategy and helping the firm to improve and control performance, however the extant literature reviewed regarding this domain made very little reference to supply chain and no mention of *supply chain performance management*. In contrast, *supply chain performance management* literature made very little mention of *strategic performance management* but did make strategic-level references to firm performance (Alomar & Pasek 2014; Cvetic & Vasiljevic 2012; Elrod et al. 2013; Gandhi et al. 2017; Gorane & Kant 2017; Stefanovic 2014). Limited research is available that links these two major domains. The two major domains are

each widely recognised in the literature for assisting firms to achieve a competitive advantage, however, the *strategic performance management* literature largely ignored the role of supply chain (especially suppliers) in helping a firm to manage performance, be competitive and achieve a competitive advantage. For example, suppliers can significantly impact firm performance but there was *very* little mention about suppliers within the extant *strategic performance management* literature reviewed, but the domain does have a strong customer focus. Use of the Balanced Scorecard is widely associated with s*trategic performance management,* which applies a strong customer focus using the scorecard's customer perspective (Kaplan & Norton 1996). The Balanced Scorecard is mostly criticised for its stakeholder imbalance because 'suppliers are absent from the scorecard' (de Waal 2013, p. 143) and this could indicate the cause of the customer/supplier-focus imbalance which potentially presents issues when measuring supply chain performance.

A firm's approach to performance improvement must reflect the evolution of competition moving from firm level to the supply chain level (Alomar & Pasek 2014). The *strategic performance management* domain's strong focus on firm performance is its greatest strength but could be its greatest limitation due to little or no link to supply chain performance in the extant literature (Alomar & Pasek 2014). *Supply chain performance management* focusses on both firm level and supply chain level performance. B2B firms are heavily reliant on the performance of strategic supply chains, and strategic supply chains are heavily reliant on the performance of each individual B2B firm within the chain. There is limited empirical research that links *supply chain performance management* and *strategic performance management*, or their link with top performing B2B firms in Australia.

Researchers argue that *supply chain performance management* is inhibited by numerous barriers linked to strategic management, for example 'lack of top management dedication' (Katiyar, cited in Wankhade & Kundu 2018, p. 224). Limited research explores a direct link between supply chain and a firm's strategic level management, and linkages between corporate strategy and supply chain management. Top management play a significant role to clearly explain the corporate strategy (De Kluyver & Pearce 2015; Schlickel 2013), however little is known about their role in supply chain and supply chain's role in top management teams to improve firm

performance (Sandberg & Abrahamsson 2010; Wagner & Kemmerling 2014). A research that reviewed 3402 articles from top supply chain management journals identified very little research focused on supply chain management as a key element in corporate strategy (Gonzalez-Loureiro et al. 2015, p. 174). It is unknown whether corporate strategy includes strategic supply chain elements at B2B firms in strategic supply chain relationships.

Strategic performance management systems are used to implement corporate strategy (Bento et al. 2014; Bisbe & Malagueño 2012; Franco-Santos et al. 2012; Srimai et al. 2011; Yeoh et al. 2014) but they are associated with negative side-effects and implementation failures due to inadequately addressing behavioural factors (Akhtar 2018; de Waal 2013; Yeoh et al. 2014). Limited research addresses the importance of people in the use of strategic performance management systems and associated behavioural aspects (de Waal 2013; Najmi et al. 2012), which impacts corporate strategy implementation and gaining a competitive advantage in competitive markets (Bryceson & Slaughter 2010; de Waal et al. 2009). The strategic performance management systems literature reviewed made no mention of corporate strategy cascading, or supply chain, but firmly linked the systems with corporate strategy implementation.

There is little empirical research focusing on corporate strategy cascading and strategy cascading and its links to firm performance (Schlickel 2013). The literature reviewed regarding strategy cascading approaches including Balanced Scorecard, Hoshin Kanri and organisational structure, identified limitations and issues with each approach, and little research was available regarding use of the value creation map created by Marr (2006) for corporate strategy cascading. There is also no research focusing on corporate strategy cascading at top performing B2B firms in Australia, whether supply chain is a key element in corporate strategy and its link to firm performance and supply chain performance, which is a significant research gap.

The literature review identified a disconnect between the two major domains *Strategic Performance Management* and *Supply Chain Performance Management*. With strategic level disconnects and problematic corporate strategy cascading approaches, how can a B2B firm within a strategic supply chain perform as required? Top

performing firms in Australia attract at least A$2 trillion in revenue (Aravanis 2019) however, little is known about how they successfully cascade corporate strategy and whether supply chain is a key element in corporate strategy, to ensure that the firm performs as required within its strategic supply chains. This research gap led to the development of the following research problem to be addressed by this research study:

> **How do executives at top performing B2B firms in Australia form and cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains?**

This research problem is the general area of focus for this research study (Corbin & Strauss 2008; Strauss & Corbin 1998). This section provided justification for this research study by highlighting gaps in the literature, presented the research problem and justified how the research problem was established. The next section justifies the relevance of the Dynamic Capabilities Theory to this research study and presents and justifies the research issues to be investigated by this research study.

1.3.2. Dynamic Capabilities Theory and research issues

The previous section highlighted gaps in the literature reviewed regarding the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* and presented and justified the research problem to be addressed by this research study. This section discusses the relevance of the Dynamic Capabilities Theory to this research study and presents and justifies the research issues to be investigated by this research study.

Organisations seek to develop unique and difficult-to-replicate dynamic capabilities to achieve long term competitive advantage, to enhance performance and competitiveness in rapidly changing and competitive business environments (Teece 2009; Vijaya et al. 2019). Dynamic capabilities are used to enhance enterprise performance and sustain competitive advantage (Blome et al. 2013; Kleinbaum & Stuart 2014; Li et al. 2015; Pezeshkan et al. 2016; Pitelis & Wagner 2019; Teece 2019; Torres et al. 2018; Vanpoucke et al. 2014; Vijaya et al. 2019) and these aspects are substantially important and relevant to the two major domains.

Teece (2009) disaggregated dynamic capabilities into three capacities including sensing, seizing, and transforming (or reconfiguring). Firms that can sense and shape

opportunities and threats, seize opportunities, and transform, reconfigure and manage threats, are able to sustain profitable growth and competitive advantage (Khan et al. 2020; Teece 2009). The definition adopted by this research study for Dynamic Capabilities Theory is defined by Teece (2009, p. 206) as the 'ability to sense and then seize new opportunities, and to reconfigure and protect knowledge assets, competencies and complementary assets so as to achieve sustained competitive advantage'. Importantly, the microfoundations of dynamic capabilities can help firms to build, evolve, and develop dynamic capabilities (Fallon-Byrne & Harney 2017). The definition adopted by this research study for microfoundations of dynamic capabilities is defined by Teece (2009, p. 3) as 'the distinct skills, processes, procedures, organizational structures, decision rules, and disciplines—which undergird enterprise-level sensing, seizing, and reconfiguring capacities are difficult to develop and deploy'.

The two major domains are ideal management constructs and complementary fields of enquiry to identify whether dynamic capabilities and microfoundations of dynamic capabilities, are found in organisational contexts relevant to these domains. Limited research is available in relation to the dynamic capabilities and microfoundations of dynamic capabilities associated with corporate strategy formulation with a strategic supply chain focus and corporate strategy cascading to perform as required within strategic supply chains, at top performing B2B firms in Australia. Considering the strong linkage between Dynamic Capabilities Theory, strategic management (Bogers et al. 2019; Teece 2009; Vijaya et al. 2019), competitive advantage, superior performance and its internal and external view of the business environment, this realisation led to the development of two research issues. The research problem was dissected into two research issues, where each issue relates to a set of dynamic capabilities and microfoundations of dynamic capabilities, in terms of the process dimensions of sensing, seizing, and transforming, to help resolve the research problem:

> **When executives at top performing B2B firms in Australia seek to ensure that the firm performs as required within its strategic supply chains, what sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with:**
>
> **1. corporate strategy formulation?** *a strategic supply chain focus*
>
> **2. corporate strategy cascading?** *to perform as required*

This research study seeks to address an important research gap in relation to the lack of research focusing on corporate strategy cascading in top performing B2B firms in Australia, whether supply chain is a key element in corporate strategy and its link to firm performance and supply chain performance, by using a theoretical framework to inform and guide data collection and data analysis. The Dynamic Capabilities Theory is discussed further in detail in Section 2.4 and the theoretical framework that underpins this research study is presented in Section 2.4.1. This section justified the relevance of the Dynamic Capabilities Theory to this research study and presented and justified the research issues to be investigated by this research study. The next section outlines the scope of the research and delimitations.

1.3.3. Scope of the research and delimitations

The previous section justified the relevance of the Dynamic Capabilities Theory to this research study and presented and justified the research issues to be investigated by this research study. This section outlines the scope and the delimitations of this exploratory qualitative research study as set by the Principal Investigator. The scope of this research study investigates and explores the intersection of the two major domains *Strategic Performance Management* and *Supply Chain Performance Management*, where the Dynamic Capabilities Theory will play a key role in exploring the research issues to help facilitate the resolution of the research problem (Section 1.3.1).

This research study focuses on the perceptions of purposefully selected industry experts (Section 3.5 and 3.5.5) with specific employment experience at top performing B2B firms in Australia (Section 3.5.1). The scope of this research study is delimited in terms of the research participant selection criteria presented in Section 3.5.1 which was used to narrow the scope and selection of participants to involve in this study. The selection of research participants is further discussed in Section 3.5 and the characteristics of the research participants who participated in this research study are provided in Section 3.5.5.

To conclude the justification for the research, limited research exists that: (a) investigates and explores the intersection of the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* using Dynamic Capabilities Theory; (b) identifies the sensing, seizing, and transforming

dynamic capabilities and microfoundations of dynamic capabilities associated with how top performing B2B firms in Australia form and cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains. Since little is known and limited research is available about the research problem (Section 1.3.1), the best place to start is by conducting an exploratory study. The limitations of this research are addressed in Section 5.6. This section outlined the scope and the delimitations of this research study. The next section provides an overview of the research methodology.

1.4. Overview of methodology

The previous section provided justification for this research study by highlighting gaps in the literature, the relevance of the Dynamic Capabilities Theory to this research study and outlined the scope of the research and delimitations. This section provides an overview of the research methodology.

1.4.1. Interpretivism research paradigm

The interpretivism paradigm is suitable for this research study because the Principal Investigator believes that the business world is constructed by every industry expert living in it, whose views and opinions change as they become more informed and sophisticated which constantly changes the business world (Guba & Lincoln 1994; Saunders et al. 2009). Section 3.2 provides further discussion regarding the research paradigm selected for this research study and examines the suitability of four categories of scientific paradigms: positivism, realism, critical theory and interpretivism (Guba & Lincoln 1994; Saunders et al. 2009).

1.4.2. Research design

Due to the lack of prior academic inquiry on the research problem, little is known about how top performing B2B firms in Australia develop and align corporate strategy firm-wide to drive the required strategic supply chain performance, therefore, this research study is exploratory in nature (Saunders et al. 2009). The purpose of this exploratory qualitative research study (Section 3.3.1) is to investigate the perceptions of purposefully selected industry experts (Section 3.5.5) to address the research issues and the research problem (Section 3.3.2). The research design of this research study follows two stages which are presented in Section 3.3.3, including: Stage 1 –

conducting a literature review (Chapter 2) and developing the research methodology (Chapter 3); Stage 2 – implementing the research methodology through qualitative data collection (Chapter 3) and qualitative data analysis of the findings (Chapter 4). Section 3.3 provides further discussion regarding the research design of this study.

1.4.3. Research strategy

An exploratory qualitative in-depth study within an interpretative research paradigm, was the most suitable research strategy (Section 3.4) to address the research problem (Section 3.3.2) by investigating a contemporary phenomenon in the 'real world' from the perspective of purposefully selected industry experts (Section 3.5.5) with specific employment experience at top performing B2B firms in Australia (Saunders et al. 2009). The research strategy included the use of open-ended in-depth questions (**Appendix A**) that were used in semi-structured in-depth interviews and in an open-text questionnaire to address a time imposition risk for the industry experts. Section 3.4 provides further discussion regarding the research strategy adopted for this research study.

1.4.4. Selection of research participants

Purposeful criterion sampling (Patton 2002; Suri 2011) was used to select research participants who met selection criteria (Section 3.5.1) regarding specific employment experience at top performing B2B firms in Australia. Using the purposeful criterion sampling strategy increased the dependability, credibility and transferability of this research study (Bisman & Highfield 2012; Given 2008; Guba & Lincoln 1994; Patton 2002; Saunders et al. 2009). The extensive process of research participant search (Section 3.5.2) and recruitment (Section 3.5.3), which included use of an interview protocol pack (Section 3.5.4) achieved the support of 30 industry expert participants (Section 3.5.5). Section 3.5 provides further discussion regarding the extensive process followed to search, select and recruit research participants for this research study.

1.4.5. Qualitative data collection

The extensive research participant recruitment process attracted the support of 30 participants (Section 3.5.5) from four capital cities (Brisbane, Melbourne, Sydney and Adelaide) and four regional centres (Newcastle, Sarina, Cairns and Townsville) across Australia. Informed consent was obtained from all research participants prior to

participating in the research study, where 11 participants participated in semi-structured in-depth interviews by phone and 19 participants responded to the open-ended in-depth questions by open-text questionnaire to mitigate time imposition risk for the industry experts. Written consent to record interviews was provided by research participants and written transcriptions were verified by the participants (Bisman & Highfield 2012; Saunders et al. 2009). Section 3.6 provides justification for the number of research participants involved in this research which aligns with interpretive research studies (Saunders et al. 2009) and the use of purposeful criterion sampling (Patton 2002; Suri 2011) increased the likelihood of reaching data saturation. A research database was strictly maintained to record information about research participants and firms and to store the interview protocol pack and all data collected and analysed which formed the basis of the data analysis. Section 3.6 provides further discussion regarding the data collection approach undertaken for this research study.

1.4.6. Qualitative data analysis

As an interpretivist researcher, the Principal Investigator sought to explore and understand the perceptions and thoughts as described in the data by the research participants, for the purpose of identifying and analysing themes and patterns (Nowell et al. 2017). Qualitative data analysis (Section 3.7) was conducted per research issue through thematic analysis, with the aid of NVivo (Beekhuyzen et al. 2010; Rowley 2014). Thematic analysis was used to identify themes and patterns relating to the research issues (Nowell et al. 2017). The data displays enabled the comparison and interpretation of the data in Chapter 4, which allowed the Principal Investigator to draw meaning and conclusions for discussion in Chapter 5 (Saunders et al. 2009). Section 3.7 provides further discussion regarding the data analysis approach undertaken for this research study.

1.4.7. Quality and trustworthiness

This exploratory qualitative interpretive in-depth research study achieved its goals of dependability (Section 3.8.1), credibility (Section 3.8.3) and transferability (Section 3.8.4) to meet the quality and trustworthiness requirements of the study (Bisman & Highfield 2012; Guba & Lincoln 1994; Lincoln & Guba 1985). The consistent use of rigorous research techniques to collect and analyse high-quality data, strengthened the dependability, credibility and transferability of this research study (Guba & Lincoln

1994; Patton 2002; Saunders et al. 2009). Some of techniques used in this research study included: using an interview protocol pack; using purposeful criterion sampling (Patton 2002; Suri 2011) to closely link the participants to the context being studied (Given 2008; Guba & Lincoln 1994; Patton 2002) and to ensure that research participants were relevant members of the business community related to the study (Given 2008); aligning the research problem and research issues with the context being studied to ensure that the research problem was appropriately addressed (Given 2008); maintaining a research database; using a two-stage research design that minimised errors and bias (Saunders et al. 2009); ensuring that the Principal Investigator did not influence research participants; and verifying interview accuracy with research participants using written transcriptions of recorded interviews. Section 3.8 further discusses and defends the quality and trustworthiness of this research study.

1.4.8. Research ethics process

The human research ethics process of the University of Southern Queensland (University of Southern Queensland 2019) was adhered to during this research study and is outlined in Section 3.9.

1.5. Structure of the thesis

The previous section provided an overview of the research methodology. This section outlines the structure of this thesis. The structure of this thesis is outlined as follows:

- **Chapter 1 – Introduction:** Provides a background to the research and an overview of the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* relevant to this research study. Highlights gaps in the literature and introduces the research problem; discusses the relevance of the Dynamic Capabilities Theory to this research study and introduces the research issues to be investigated by this research study; and outlines the scope of the research and delimitations. Provides an overview of the research methodology. Outlines the structure of the thesis and defines key terms and concepts.
- **Chapter 2 – Literature Review:** Presents a detailed review of the literature related to the two major domains *Strategic Performance Management* and *Supply Chain Performance Management*, and the Dynamic Capabilities Theory. Defines *strategic performance management* and discusses its importance; explores the

links between strategic management, corporate strategy, and *strategic performance management*; and explores and discusses corporate strategy cascading, strategy cascading approaches and the role of strategic performance management systems. Defines *supply chain performance management* and discusses its importance; explores the links between strategic management, corporate strategy, supply chain and *supply chain performance management*; and explores links with corporate strategy cascading. Defines and explores Dynamic Capabilities Theory and its relevance to the two major domains and presents the theoretical framework that underpins this research study.

- **Chapter 3 – Methodology:** Provides a detailed account of the research design and methodology guiding and shaping the research. Justifies the selection of the interpretivism paradigm**,** the exploratory purpose of the research and reiterates the research problem and research issues and outlines the stages of the research design. Justifies the exploratory qualitative in-depth research strategy and outlines the research methodology used to select and recruit research participants and to collect and analyse the data. Addresses the quality and trustworthiness of the methodology and outlines ethical considerations.
- **Chapter 4 – Findings:** Presents the findings and results of the qualitative data analysis of the data collected from research participants in response to the open-ended in-depth questions. Presents the analyses of key themes that emerged and were established from the NVivo-assisted qualitative data analysis per research issue and identifies the sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with each research issue.
- **Chapter 5 – Discussion and Conclusions:** Provides a discussion regarding the findings presented in Chapter 4, within the context of the literature review and presents conclusions. Summarises the contribution to knowledge made by this research study. Presents a discussion and conclusions about the two research issues and presents conclusions about the research problem. Explains the implications for theory and practice, outlines the limitations of this research, and provides directions for future research.

The next section defines key terms and concepts.

1.6. Definition of key terms and concepts

This section presents a definition for the terms and concepts adopted by this research study:

- **Corporate strategy:** The highest-level overall strategy for a firm which defines the firm's vision, strategic goals and objectives (Adler 2018) and identifies markets to compete and how, and identifies how each of its businesses or business units should be managed (De Kluyver & Pearce 2015).
- **Corporate strategy cascading:** No definition in the literature reviewed existed for corporate strategy cascading. The closest definition adopted by this research study for corporate strategy cascading is the 'process of vertical and horizontal deployment and alignment of an organizational strategy' (Schlickel 2013, p. 24).
- **Dynamic Capabilities Theory:** 'The ability to sense and then seize new opportunities, and to reconfigure and protect knowledge assets, competencies and complementary assets so as to achieve sustained competitive advantage' (Teece 2009, p. 206).
- **Microfoundations of dynamic capabilities:** The 'distinct skills, processes, procedures, organizational structures, decision rules, and disciplines—which undergird enterprise-level sensing, seizing, and reconfiguring capacities are difficult to develop and deploy' (Teece 2009, p. 3).
- **Strategic alignment:** The facilitation of 'coordinated actions of firm departments and employees, assuring that efforts at work are being directed toward overarching firm goals' (Ralston et al. 2015, p. 50).
- **Strategic management:** Developing the firm's strategic vision and objectives, and formulating, implementing and evaluating the corporate strategy, reading the internal and external environment, and using specific activities and programs to control how the firm achieves its goals and objectives (Adler 2018; Bolland 2017; Omalaja & Eruola 2011; Zamecnik & Rajnoha 2015).
- **Strategic performance management:** Defined by de Waal (2013, p. 5) as:

  > the process in which steering of the organization takes place through the systematic definition of mission, strategy, and objectives of the organization, making these measurable through critical success factors and key performance indicators in order to be able to take corrective and preventive actions to keep the organization on track to great performance.

- **Strategic performance management system:** Defined by de Waal (2013, p. 27) as:

  > a system in which the formal procedures that collect, analyze, and report performance information, which is used by organization members to steer and control business activities, are organized in such a way that everyone in the organization strives towards achieving the strategic objectives of that organization.

- **Strategic supply chains:** Supply 'chains whose members are strategically, operationally, and technologically integrated' (Hult et al. 2004, p. 241).
- **Supply chain:** '[…] a system of organizations, people, activities, information and resources involved in moving a product or service from supplier to customer' (García-Alcaraz et al. 2019, p. v).
- **Supply chain configuration:** 'is a set of supply chain units and links among these units defining the underlying supply chain structure and the key attributes of the supply chain network' (Chandra & Grabis 2016, p. 28).
- **Supply chain management:** '[…] the management of relationships in the network of organisations, from end customers through original suppliers, using key cross-functional business processes to create value for customers and other stakeholders' (Global Supply Chain Forum, cited in Lambert 2014, p. 2).
- **Supply chain performance management:** Defined by Wankhade and Kundu (2018, p. 219) as:

  > the continuous process of selecting, implementing, monitoring and revising the measures and metrics to evaluate the performance of supply chain function in order to take decisions at operational, tactical as well as strategic levels particularly in aligning with [the] firm's strategy, goals and objectives.

- **Supply chain strategy:** A strategy that specifies 'how a firm will achieve its competitive advantages through its supply chain capabilities' (Qi et al. 2011, p. 372) within the internal and external environment (Liberatore & Miller 2012) to meet the objectives of the corporate strategy.

The next section concludes Chapter 1.

1.7. Summary

This chapter outlined the basis of this thesis. A background to the research was provided including an overview of the two major domains *Strategic Performance*

Management and *Supply Chain Performance Management* relevant to this research study. Justification for this research study was provided by: highlighting gaps in the literature; presenting and justifying the research problem to be addressed by this research study; discussing the relevance of the Dynamic Capabilities Theory to this research study and presenting and justifying the research issues to be investigated by this research study; and outlining the scope of the research and delimitations. An overview of the research methodology was provided, followed by an outline of the structure of the thesis and a list of definitions for the terms and concepts adopted by this research study.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

Chapter 1 provided a background to the research and an overview of the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* relevant to this research study. Gaps in the literature were highlighted and the research problem was introduced. The relevance of the Dynamic Capabilities Theory was discussed, and the research issues were introduced. The scope of the research and delimitations were outlined, and an overview of the research methodology was provided. The structure of the thesis was outlined, and key terms and concepts were defined.

The objective of the literature review is to identify existing research relevant to the two major domains and the Dynamic Capabilities Theory, to gain an understanding and to identify gaps in the literature which may require investigation.

2.1.1. Objective of the chapter

The objective of this chapter is to present a detailed review of the literature related to the two major domains *Strategic Performance Management* and *Supply Chain Performance Management*, and the Dynamic Capabilities Theory. Section 2.2 defines *strategic performance management* and discusses its importance; explores the links between strategic management, corporate strategy and *strategic performance management*; and explores and discusses corporate strategy cascading, strategy cascading approaches and the role of strategic performance management systems. Section 2.3 defines *supply chain performance management* and discusses its importance; explores the links between strategic management, corporate strategy, supply chain and *supply chain performance management*; and explores links with corporate strategy cascading. Section 2.4 defines and explores Dynamic Capabilities Theory and its relevance to the two major domains and presents the theoretical framework that underpins this research study. Section 2.5 provides a summary of this chapter. **Figure 2.1** depicts the second chapter and its five sections.

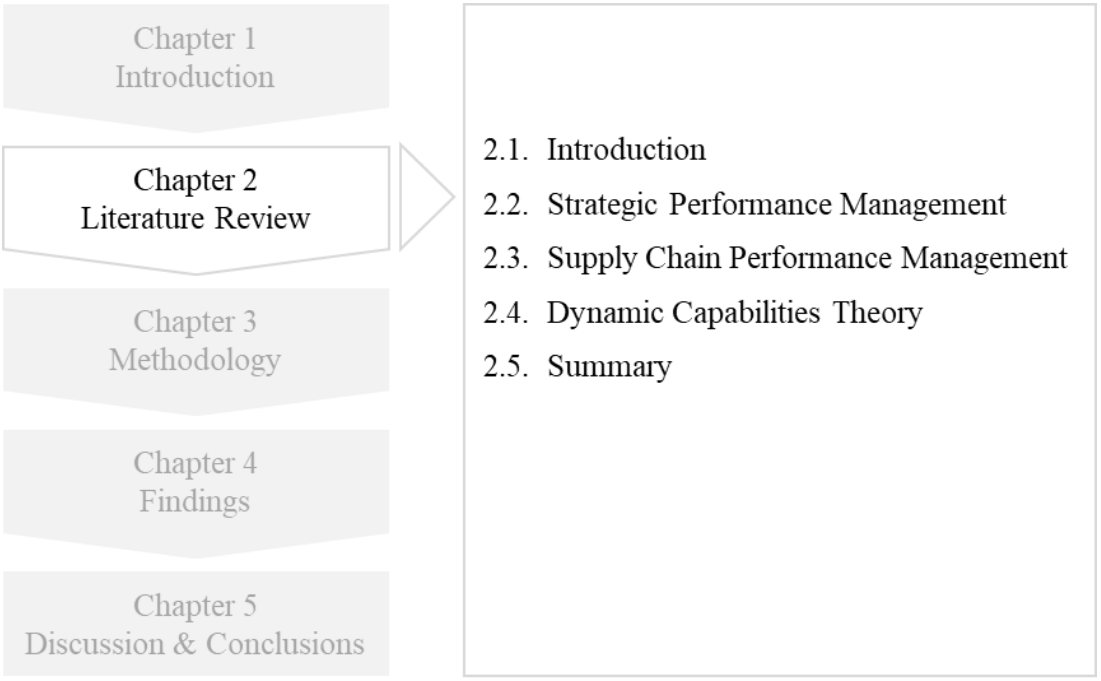

Figure 2.1: Outline of Chapter 2

2.2. Strategic Performance Management

Organisations are in constant search of better ways to maintain or increase their competitiveness and achieve high performance goals (de Waal 2018). How each business unit, division and functional area contributes towards increasing an organisation's competitiveness and performance is a key focus for senior management (Sardana et al. 2016). *Strategic performance management* plays a critical role in firm performance and gaining a competitive advantage (Striteska & Jelinkova 2015). As the scope of this research study investigates and explores the *strategic performance management* domain, it is appropriate to review the relevant literature. This section defines *strategic performance management* and discusses its importance; explores the links between strategic management, corporate strategy, and *strategic performance management*; and explores and discusses corporate strategy cascading, strategy cascading approaches and the role of strategic performance management systems.

2.2.1. Importance of Strategic Performance Management

To assist in understanding the *strategic performance management* domain, definitions and its importance are provided from the literature and discussed. *Strategic performance management* is widely used to develop, define, redefine and implement a firm's strategy, achieve higher results orientation across the firm, and to manage and

control the performance of the firm (de Waal 2013; de Waal & Kourtit 2013; Franco-Santos et al. 2012; Taticchi et al. 2010; Zamecnik & Rajnoha 2015). Executives use *strategic performance management* to create a performance-driven firm or to take the performance of their firm to the next level (de Waal 2013). Also known as corporate performance management or enterprise performance management (Akhtar 2018; Yeoh et al. 2014), the definition adopted by this research study for *strategic performance management* is defined by de Waal (2013, p. 5) as:

> the process in which steering of the organization takes place through the systematic definition of mission, strategy, and objectives of the organization, making these measurable through critical success factors and key performance indicators in order to be able to take corrective and preventive actions to keep the organization on track to great performance.

Strategic performance management consists of implementing a process and a system. The above definition defines the process and this section explores the process side of *strategic performance management*. The role of strategic performance management systems is explored in the Section 2.2.3.3. Kourtit and Nijkamp (2013) report that *strategic performance management* uses strict internal management principles and micro-economic efficiency analysis to improve the competitive performance of large firms and small to medium-sized enterprises. *Strategic performance management* requires the development and implementation of measurable critical success factors and key performance indicators (KPIs) (Kourtit & Nijkamp 2013; Yadav & Sushil 2014). There is clear and strong linkage between *strategic performance management* and the firm's strategy and that *strategic performance management* is the vehicle used to continually refine and implement the strategy (Marr 2006). Both Marr (2006) and de Waal (2013) view strategy development as the driving force of the strategic performance management process. Marr (2006) views strategy formulation (or development) as a pre-requisite to *strategic performance management* and de Waal (2013) views strategy development as the first step in the strategic performance management process. To establish a world-class firm, de Waal (2013, p. 5) explains that the strategic performance management process needs to include and integrate six sub-processes including 'strategy development, budgeting/target setting, execution/forecasting, performance measurement, performance review, and incentive compensation'.

Implementation of the strategic performance management process is considered effective when the firm's performance targets are achieved, including financial and non-financial targets (de Waal & Kourtit 2013). De Waal (2013) reports that the budget/target setting sub-process, as part of the strategic performance management process, can result in budgeted targets becoming out-of-date or seemingly unrealistic when the budgeting process starts too early in the year, causing managers to manipulate the targets. Improving the budgeting/target setting process is reported to increase the reliability of the budget data and the efficiency of budget preparation when developing operational plans and committing resources (de Waal 2013). Marr (2006) argues that a 'blame culture' is a key barrier to learning when firms focus on financial targets not being achieved, instead of focusing on how to improve performance drivers. The performance measurement sub-process is also relying on high quality management information and reports that are efficient to produce, to establish critical success factors and KPIs to allow other processes to be effective and to allow staff to be proactive (de Waal 2013). Therefore, the strategic performance management process is relied upon to address key business issues and to address organisational barriers to capitalise on learning opportunities as the firm strives to achieve targets. The researchers across the extant literature contend that firms that use *strategic performance management* perform better than non-performance management-driven firms, with financial advantages including increases in revenue and profit, higher return on assets and cost reductions (de Waal & Kourtit 2013; Neely 2008). By using *strategic performance management*, researchers claim that firms can improve organisational management, management control and operational efficiency to achieve greater cost reductions (de Waal & Kourtit 2013; Zamecnik & Rajnoha 2015). Greater organisational control can be gained by using *strategic performance management* due to its comprehensive firm-wide performance measurement of the firm's strategy, people and projects, which increases compliance, accountability and commitment to the strategy (de Waal & Kourtit 2013; Neely 2008).

The researchers from the extant literature suggest that firms that use *strategic performance management* are able to achieve higher performance results due to greater strategic clarity and focus across the firm since staff have a better understanding of the firm's strategy, strategic goals, results expected and their role (de Waal & Kourtit 2013; Neely 2008). De Waal (2013) reports that the execution/forecasting sub-process,

as part of the strategic performance management process, involves implementing activities to achieve the strategy and using early warning signals to allow the firm to implement corrective or preventive actions to stay on track, which is supported by the performance review sub-process. Firms that do not use an early warning system or use it consistently, or have low quality forecasts or do not conduct performance reviews in a timely manner, prevent staff from addressing issues proactively and put the firm at risk of its performance not staying on track (de Waal 2013). Therefore, the strategic performance management process is relied upon to manage the firm's performance proactively. Researchers agree that staff that are supported by the strategic performance management process have a higher level of commitment towards the firm, are considered higher quality, proactive and process oriented, resulting in better strategic alignment across the firm (de Waal & Kourtit 2013; Neely 2008). Also, when the incentive compensation sub-process is sufficiently aligned with the other sub-processes, the firm can correctly reward staff based on performance-driven behaviour (de Waal 2013). Researchers agree that firms that use *strategic performance management* have better strategic planning processes, have more satisfied staff when the firm broadly communicates the firm's strategy, and this results in better products and services and enhanced firm reputation (de Waal & Kourtit 2013; Neely 2008). Researchers have found that *strategic performance management* applies an equal focus on the firm's strategy and the quality of its staff, and enhances the firm's ability to formulate, deploy, align and translate a better strategy across all levels of the firm to improve firm performance (de Waal & Kourtit 2013; Neely 2008).

It was discovered that the extant literature that was reviewed regarding *strategic performance management* made little mention of supply chain. From the literature reviewed relating to *strategic performance management*, only two authors made mention of supply chain. Marr (2006) briefly acknowledged supply chain risk to explain the importance of suppliers due to their impact on the firm's ability to service its customers, especially when suppliers are used for outsourcing purposes or if the firm has implemented just-in-time delivery. Adler (2018) very briefly mentioned that supply chain modifications is a way to achieve cost savings. Customers are served typically from a firm's outbound supply chain and *most* of the *strategic performance management* literature reviewed acknowledged customers, through for example: improvement of customer care (de Waal & Kourtit 2013; Marr 2006); review of

customer satisfaction (Chau 2008; Franco-Santos et al. 2012); and level of delivery service to customers (Adler 2011). Suppliers significantly impact a firm's inbound and outbound supply chains, internal operations and almost everything a firm does, but there was *very* little mention of suppliers within the extant *strategic performance management* literature reviewed. Examples of suppliers being mentioned included bargaining power of suppliers (Marr 2006) and acknowledgement that 'suppliers are absent from the [Balanced] scorecard' as very briefly but importantly criticised by de Waal (2013, p. 143). De Waal (2013, p. 143) argues that the Balanced Scorecard is mostly criticised due to its 'imbalance in the number of stakeholders that is accounted for' and that 'suppliers are absent from the scorecard'. The Balanced Scorecard is a strategic management system and performance management tool developed by Kaplan and Norton (1996) that helps a firm to translate its vision and strategy into four perspectives: financial, customer, internal business processes, and learning and growth. Considering that *most* of the *strategic performance management* literature reviewed acknowledged use of the Balanced Scorecard, this could indicate the cause of the customer/supplier-focus imbalance. Logistics was also barely mentioned in the extant *strategic performance management* literature reviewed.

The extant literature that was reviewed in the *strategic performance management* domain, widely recognised the importance for a firm to be competitive and achieve a competitive advantage (Adler 2011; Adler 2018; de Waal & Kourtit 2013; Franco-Santos et al. 2012; Omalaja & Eruola 2011), but largely ignored the role and importance of supply chain (especially suppliers) in helping a firm to manage performance, be competitive and achieve a competitive advantage. The literature review of the *strategic performance management* domain indicates that research conducted in this domain is focused on the customer-facing side of the supply chain, with little focus on suppliers, indicating a significant performance management imbalance in *strategic performance management* research. The literature reviewed did not address whether this customer/supplier-focus imbalance exists in the practice of *strategic performance management*, especially for firms who have implemented the Balanced Scorecard. Little *strategic performance management* literature addressed supply chain, especially regarding suppliers. To assist understanding *strategic performance management,* this section defined *strategic performance management* and discussed its importance as identified from the literature. The next section explores

the links between strategic management, corporate strategy, and *strategic performance management*.

2.2.2. Links with strategic management and corporate strategy

The previous section defined and discussed *strategic performance management* and its importance from the literature to assist in understanding this domain. This section explores the links between strategic management, corporate strategy, and *strategic performance management*. De Waal (2013, p. 72) postulates that strategic management determines the strategy for the firm, but states that the strategy is often 'set in intangible or vague terms' and that it is the role of the strategic performance management process to make the strategy tangible and measurable. Other authors claim that strategic management includes developing the firm's strategic vision, and formulating, implementing and evaluating the firm's strategy (also known as 'corporate strategy'), including developing strategic objectives, and using specific activities and programs to control how the firm achieves its goals and objectives (Adler 2018; Omalaja & Eruola 2011; Zamecnik & Rajnoha 2015). Bolland (2017, p. 29) states that strategic management can include a range of functions including 'reading the internal and external environment, setting direction for the organization, allocating resources, measuring outcomes, and a myriad of other pursuits'.

The highest-level overall strategy for a firm is identified in the literature as a corporate strategy, corporate-level strategy, business strategy, grand strategy or the firm's strategy (Adler 2018; Barr 2017; Bolland 2017; Brennan 2015; De Kluyver & Pearce 2015). The definition adopted by this research study for corporate strategy is: The highest-level overall strategy for a firm which defines the firm's vision, strategic goals and objectives (Adler 2018) and identifies markets to compete and how, and how each of its businesses or business units should be managed (De Kluyver & Pearce 2015). The literature provides a range of definitions for strategy including 'a strategy is a plan that creates or sustains a competitive advantage' (Brennan 2015, p. 4). Similarly, de Kluyver and Pearce (2015, p. 1) state that 'strategy is about positioning an organization for competitive advantage'. De Kluyver and Pearce (2015, p. 1) claim that strategy is the result of strategic choices made by executives about 'what to offer, where to play and how to win, to maximize long-term value'. These strategic choices pertain to developing the value proposition offered to customers, identifying customer target

markets, developing capabilities and policies to compete, and selecting options to increase economic value (De Kluyver & Pearce 2015). Adler (2018, p. 50) explains that an organisation's mission statement defines 'who we are' and the vision statement defines 'who we want to be' and then the corporate strategy defines 'how we'll achieve the vision', from which then the goals and objectives are developed. The definition adopted by this research study for strategic management is: developing the firm's strategic vision and objectives, and formulating, implementing and evaluating the corporate strategy, reading the internal and external environment, and using specific activities and programs to control how the firm achieves its goals and objectives (Adler 2018; Bolland 2017; Omalaja & Eruola 2011; Zamecnik & Rajnoha 2015). De Kluyver and Pearce (2015, p. 14) recognise three strategic management levels of strategy formulation including 'corporate, business unit, and functional levels'. The authors explain that corporate strategy identifies markets to compete in, and how each of its businesses or business units should be managed; business unit strategy decides products and services to offer, manufacturing decisions, and how to market; and functional strategies pertain to the management of specific functional areas for example 'marketing, human resources, or technology' (De Kluyver & Pearce 2015, p. 14). While Adler appreciates functional strategies are required, he only recognises two levels of organisational strategy including 'corporate-level strategy and business-unit-level strategy' (Adler 2018, p. 55). De Kluyver and Pearce, and Adler agree that the business-unit level strategy is recognised as the firm's competitive strategy to build and leverage the firm's capabilities to levels on par with or higher than that offered by competitors (Adler 2018; De Kluyver & Pearce 2015). This research study uses the term 'corporate strategy' as the highest-level overall strategy for a firm. Gaps were identified in the extant literature reviewed regarding *strategic performance management* with no references in relation to supply chain during corporate strategy formulation or mention of 'supply chain strategy', especially where it fits in relation to the corporate strategy. Supply chain strategy is discussed further in Section 2.3.2.

Strategic management and *strategic performance management* are closely intertwined and seemingly difficult to separate, however, researchers are in agreement that *strategic performance management* supports strategic management, and that the firm's owners and senior management are accountable for strategic management and planning (Adler 2018; De Kluyver & Pearce 2015; de Waal & Kourtit 2013; Omalaja

& Eruola 2011; Zamecnik & Rajnoha 2015). While formulating the corporate strategy may originate from strategic management processes, the strategic performance management process plays a significant role in the strategy's definition, development, continuous refinement, implementation and delivery of strategic outcomes (de Waal & Kourtit 2013; Neely 2008). Strategic management and *strategic performance management* are integrated processes and are reliant on each other. There is consensus across the literature reviewed that the firm's strategic approach to performance management includes the implementation of the firm's strategy (Adler 2018; de Waal & Kourtit 2013; Omalaja & Eruola 2011). The literature reviewed firmly indicates that implementing the corporate strategy is a role undertaken within the *strategic performance management* domain. *Strategic performance management* could be viewed as "bringing corporate strategy to life" due to its extensive strategy-implementation approach. This section explored the links between strategic management, corporate strategy, and *strategic performance management*. The next section explores and discusses corporate strategy cascading, strategy cascading approaches and the role of strategic performance management systems.

2.2.3. Corporate strategy cascading

The previous section explored the links between strategic management, corporate strategy, and *strategic performance management*. This section explores and discusses corporate strategy cascading, strategy cascading approaches and the role of strategic performance management systems.

2.2.3.1. Deployment and strategic alignment

This section explores and discusses corporate strategy cascading as it was identified from the literature reviewed in Section 2.2 that the *strategic performance management* domain plays a major role in developing, defining, refining and implementing the corporate strategy. At this point in the literature review it is important to mention that there is limited empirical research focusing on corporate strategy cascading. Operational strategy cascading provides relevant key learnings for this research study (Schlickel 2013). No definition in the literature reviewed existed for corporate strategy cascading. The closest definition adopted by this research study for corporate strategy cascading is the 'process of vertical and horizontal deployment and alignment of an organizational strategy' (Schlickel 2013, p. 24). Executing the corporate strategy

throughout the firm improves clarity about the firm's strategic direction, what it wants to achieve and improves the quality of decision-making (Adler 2018; de Waal 2013; Paladino 2011). De Kluyver and Pearce (2015, p. 37) explain that transparency is critical and that 'effective strategy implementation cannot occur if lines of authority are blurred or responsibility is ill defined'. Personnel in a firm cannot make good decisions if they do not understand the corporate strategy or their role in moving it forward; and therefore involving them in strategy cascading is required to make them feel informed, empowered and motivated (Lawson et al. 2005; Loch 2008). Barr (2014, p. 131) emphasises that strategic alignment is where 'every team or work group throughout the organisation or business is focused on the most important results for which they are responsible'. Schlickel (2013, p. vii) found that the quality of strategy cascading process is reliant on three variables including: coordination; 'enabling structures for the front-line employees'; and 'consistency of the vertical cascading process'. Beer and Eisenstat (cited in Schlickel 2013, p. 23) found that poor coordination across functions impacts the viability of strategy implementation. As the corporate strategy is cascaded through the firm, managers are making decisions about the resources and capabilities that are required to achieve the firm's strategic goals (De Kluyver & Pearce 2015; Paladino 2011). De Kluyver and Pearce (2015, p. 13) postulate that 'strategic alignment can be directed at closing strategic capability gaps or at maintaining strategic focus'. The core competencies of a firm require strategic alignment with the needs of markets where firms operate, and any capability gaps need to be identified (De Kluyver & Pearce 2015). Sardana et al. (2016) found that strategic alignment between operations and the firm's objectives is the most important contributor to firm performance. Firms that align core competencies, business processes and capabilities with the changing needs of emerging markets experience long term success (De Kluyver & Pearce 2015; Prieto & de Carvalho 2011). This section explored and discussed corporate strategy cascading including deployment and strategic alignment. The next section explores strategy cascading approaches.

2.2.3.2. Strategy cascading approaches

To assist in understanding strategy cascading, several strategy cascading approaches are explored and discussed. The literature identifies multiple ways to facilitate and support strategic-level and operational-level strategy cascading including the use of the Balanced Scorecard (Adler 2018; Barr 2014; Lawrie et al. 2016), value creation

maps (Marr 2006), Hoshin Kanri (Chau 2008; Giordani Da Silveira et al. 2018; Schlickel et al. 2013) and organisational structure (Adler 2018; Barr 2014).

The Balanced Scorecard was introduced in Section 2.2.1. Neely (2008) points out that little research has been conducted which demonstrates the Balanced Scorecard's impact on firm performance. Their research found that use of the Balanced Scorecard to cascade strategy can result in improved firm performance but were not confident in their findings and emphasised that more research is required. Lawrie et al. (2016) found that multiple Balanced Scorecards can be used to coordinate strategy cascading to achieve strategic alignment across the firm, especially large firms with local agendas. However, strategy cascading problems were discovered between large firms and their local business units when using the first-generation and second-generation Balanced Scorecards as strategic alignment was not achieved (Lawrie et al. 2016). Lawrie et al. (2016) discovered that the third-generation Balanced Scorecard was more effective in achieving strategic alignment. Adler (2018) claims that the inconsistent set of performance measures under the organisational capacity perspective (originally innovation and learning perspective) is a major shortcoming with the Balanced Scorecard. In Section 2.2.1 it was identified that the Balanced Scorecard is mostly criticised for its imbalance in stakeholder focus; it has a strong focus on customers but it does not consider suppliers on the scorecard (de Waal 2013) which presents issues when measuring supply chain performance.

The value creation map focuses on the tangible and intangible drivers of value creation and is regarded by users as a more superior tool than the Balanced Scorecard (Marr 2006). The value creation map was produced based on the shortcomings of the Balanced Scorecard's strategy map which only considers direct dependencies to implement the corporate strategy, whereas the value creation map considers both direct dependencies, for example technology infrastructure, and indirect dependencies, for example skills to use the technology (Marr et al. 2004). Tangible drivers include tangible resources (assets) which includes physical and financial resources; for example physical resources such as plant, equipment and technology infrastructure; and financial resources such as cash and borrowings (Marr 2006). Intangible drivers include intangible resources (assets) for example knowledge, skills and relationships (Marr 2006). The value creation map is a one-page visual representation of the

corporate strategy which identifies the links between key components of the strategy, allowing the map to be used to help communicate the strategy to create a shared understanding about the 'big picture' (Marr 2006). Marr (2006, p. 73) reports that the value creation map is used by business units to cascade the corporate strategy onto a map that 'reflects their reality, but which is aligned with the strategy of the business'. The value creation map allows the business units to identify how their business unit contributes to the corporate strategy (Marr 2006). Its link to firm performance is that the value creation map aids in the understanding of a firm's non-financial and intangible drivers of performance (Marr 2006). There is little research available on the use, evaluation and effectiveness of the value creation map created by Marr (2006) for corporate strategy cascading in the literature reviewed.

Thürer et al. (2019) explain that Hoshin Kanri is a top-down strategy cascading process to cascade strategic goals throughout the firm to the lowest level of the firm. Hoshin Kanri is an operational strategy cascading process (Schlickel 2013; Schlickel et al. 2013; Thürer et al. 2019) as opposed to a corporate strategy cascading process. Hoshin Kanri includes the use of "catchball" feedback cycles via a combined bottom-up/top-down approach that involves different levels of the firm providing feedback on what should be and can be achieved and how it can be achieved (Giordani Da Silveira et al. 2018; Schlickel 2013; Schlickel et al. 2013; Thürer et al. 2019). The process of vertical and horizontal deployment and alignment of strategy can be achieved using Hoshin Kanri, which is also used to help with the coordination of complexities within firms (Chen & Miller 2011; Schlickel 2013; Thürer et al. 2019). Schlickel et al. (2013) identified that Hoshin Kanri alone is inadequate for strategy cascading as it is limited in its approach. While Hoshin Kanri is used to link strategy with planning cycles across the firm, it is heavily reliant on information sharing and knowledge (Schlickel 2013; Schlickel et al. 2013).

Cascading corporate strategy across a firm, identifies how each part of the firm will contribute towards achieving the firm's strategic objectives (Barr 2014). Cascading the corporate strategy via the organisational structure by getting each department to create a mini version of the corporate strategy has been problematic, as not all strategic objectives are relevant or practical for every department (Barr 2014). Barr (2014) observes that functional level departments are cloning the corporate strategy's

strategic objectives into their department's goals, regardless of whether the firm's goals are relevant for their function. This practice puts the department at risk of not delivering services as required and the firm at risk of not achieving firm performance targets (Barr 2014). An alternative approach to cascading the corporate strategy via the organisational structure is provided by Adler (2018, p. 119) who explains that the cascading process through the firm relies on communicating strategic objectives to business-unit levels first to focus on the development of 'market satisfaction and financial performance targets'. Strategic objectives are cascaded down to departments by being translated into 'customer satisfaction, flexibility, and productivity targets' (Adler 2018, p. 119), then cascaded down to work centres by being translated into 'quality, delivery, process time, and cost targets' (Adler 2018, p. 119). Barr (2014) cautions against the equal sharing of corporate targets across the firm to prevent compromising the ability of the business units and departments to function and deliver quality services.

The literature reviewed regarding strategy cascading approaches including Balanced Scorecard, Hoshin Kanri and organisational structure, identified limitations and issues, and little research was available regarding the value creation map created by Marr (2006). In the literature reviewed, little is known about strategy cascading approaches suitable for successful corporate strategy cascading and Schlickel (2013) also reports that little research is available on strategy cascading. This section explored and discussed strategy cascading approaches. The next section explores the role of strategic performance management systems in supporting corporate strategy implementation.

2.2.3.3. Role of strategic performance management systems

In Section 2.2.1, the importance of *strategic performance management* was discussed, a definition was provided for the strategic performance management process and its six sub-processes were outlined. To control the strategic performance management process and the firm, a strategic performance management system is implemented to measure and control performance by deploying 'accountabilities and responsibilities to all levels in the organization' (de Waal 2013, p. 13). This section explores the role of strategic performance management systems in supporting corporate strategy implementation. Also known as a corporate performance management system (Yeoh et al. 2014), enterprise performance management system (Akhtar 2018), management

control and information system (de Waal 2013) or performance measurement and management system (de Waal 2013), the definition adopted by this research study for strategic performance management system is defined by de Waal (2013, p. 27) as:

> a system in which the formal procedures that collect, analyze, and report performance information, which is used by organization members to steer and control business activities, are organized in such a way that everyone in the organization strives towards achieving the strategic objectives of that organization.

Alternatively, Akhtar (2018, p. 924) defines a strategic performance management system as a system with 'KPIs to quantify the efficiency, productivity, quality and effectiveness of actions undertaken by the enterprise so as to monitor, control, manage and perform the activities'. A strategic performance management system is regarded as a good system when it is accepted and well-used by the firm; the performance information on all relevant critical areas of the firm are continuously collected, analysed and distributed; and operational and strategic performance improvements are achieved from the actions taken as a result of system use (de Waal 2013). Yeoh et al. (2014, p. 105) identified three key benefits of strategic performance management systems including 'strategy execution, process efficiency, and fact-based decision-making'. The strategic performance management system supports decision-making and action-taking by distributing financial and non-financial information across the firm (Akhtar 2018; Bento et al. 2014; Bisbe & Malagueño 2012; Silvi et al. 2015; Yeoh et al. 2014; Zamecnik & Rajnoha 2015). Researchers report that the use of strategic performance management systems is linked with improved firm performance (Akhtar 2018; Bento et al. 2014; Bisbe & Malagueño 2012; Silvi et al. 2015; Yeoh et al. 2014).

One of the main roles of strategic performance management systems is corporate strategy implementation (Bento et al. 2014; Bisbe & Malagueño 2012; Franco-Santos et al. 2012; Srimai et al. 2011). The increase in popularity of strategic performance management systems was brought about by advances in IT, the use of critical success factors and KPIs, the heightened importance of performance management, the need to monitor strategic processes and human behaviour, and the changing nature of the economy (Akhtar 2018). Strategic performance management systems are used to support the management of performance information sources of value creation including tangible and intangible assets (de Waal 2013; Marr 2006). While researchers

argue that strategic performance management systems should be used strategically align metrics (Bisbe & Malagueño 2012; Franco-Santos et al. 2012), there was limited literature addressing using these systems for corporate strategy cascading and the associated cascading of metrics and KPIs.

De Waal (2013, p. 30) recommends using a strategic performance management development cycle to establish the strategic performance management system in **three stages** including: designing a strategic management model, designing a strategic reporting model and designing a performance-driven behavioural model. De Waal (2013, p. 30) posits that the system needs to consider 'both the managerial and the behavioural aspects of performance management'. As the firm progresses through and completes each stage of the cycle, it will restart from the first stage each time the corporate strategy changes, upon which the strategic performance management system will be updated (de Waal 2013). **Stage one** sets the foundation for the strategic performance management process by establishing the strategic responsibility structure, strategic objectives and strategic action plans (de Waal 2013, pp. 30-1). This stage includes defining senior management's role in corporate strategy planning, development, deployment and execution monitoring; and creating an understanding regarding the firm's strategic direction and corporate strategy (de Waal 2013). De Waal (2013) explains that a strategy gap can occur in stage one in between establishing the corporate strategy and implementing it, and emphasises the importance of being able to translate the strategy across each level in the firm. **Stage two** focuses on the reporting requirements of the corporate strategy to monitor its execution (de Waal 2013). This stage involves developing critical success factors and KPIs including financial and non-financial, which are central to the development of the strategic performance management system (Bento et al. 2014; Bisbe & Malagueño 2012; de Waal 2013). De Waal (2013) endorses the use of the Balanced Scorecard in stage two. Many strategic performance management systems are supported by a Balanced Scorecard and have been proven to be more effective and reliable when created and developed together with personnel (Bryceson & Slaughter 2010). The Balanced Scorecard was explored and discussed in Sections 2.2.1 and 2.2.3.2 and shortcomings were identified. Stage two also involves setting up the technology architecture for the strategic performance management system to ensure it brings together all required information at a central point (de Waal 2013). To enable and support decision-making,

setting up the technology architecture requires making sure the right people across the firm have the right information at the right time in the right format to monitor and execute realisation of the corporate strategy (de Waal 2013). De Waal (2013, p. 195) emphasises the importance of getting the technology right, as 'achieving harmonious cooperation between the different components' in the technology architecture is difficult. **Stage three** requires creating conditions that drive performance and build trust by encouraging participation and providing learning opportunities about the KPIs, results and actions that can improve results (de Waal 2013). To achieve individual performance-driven behaviour, de Waal (2013, p. 232) explains that 'individual responsibilities, targets, and incentives should be aligned with the strategic objectives of the organization'. Addressing negative side-effects and improving behavioural issues is required however there is limited research on the importance of people in the use of strategic performance management systems and associated behavioural aspects (de Waal 2013).

Performance measurement and management can cause negative side-effects within a firm and this can cause *strategic performance management* implementations to fail (Bryceson & Slaughter 2010; de Waal 2013). Researchers identify that *strategic performance management* implementation issues can include a lack of leadership, poorly defined metrics, metrics not linked to the corporate strategy, too many KPIs, time and expense, and resistance to change (Akhtar 2018; Yeoh et al. 2014). Akhtar (2018) identified that there is little research regarding the success and failures of *strategic performance management* implementation or critical success factors. Neely explains that when 'performance measures are used as a means of control, the people being measured begin to manage the measures rather than performance' (cited in de Waal 2013, p. 201). Ineffectively addressing the behavioural factors that arise during the development, implementation and maintenance of strategic performance management systems is the number one cause of system failure which can prevent the firm from achieving its corporate strategy (Bryceson & Slaughter 2010; de Waal et al. 2009). Najmi et al. (2012) warn that management need to pay attention to employees' behaviour when determining performance targets and when increasing targets, as less than maximum performance effort can result when employees try to prevent the increase of targets. Also, the way performance metrics are defined and calculated within a strategic performance management system can impact the behaviour of

internal stakeholders (Najmi et al. 2012). Competitive advantages in competitive markets are gained when firms implement a strategic performance management system in full, due to the exceptional levels of efficiency that they promote (de Waal et al. 2009; Kourtit & Nijkamp 2013). De Waal et al. (2009) found that organisations have greater financial and non-financial advantages when a strategic performance management system implementation is fully completed, leading to firms requiring fewer inputs to produce larger outputs as a result of system effectiveness.

This section explored the role of strategic performance management systems in supporting corporate strategy implementation. The strategic performance management systems literature reviewed made no mention of corporate strategy cascading, or supply chain, but firmly linked the systems with corporate strategy implementation. A review of strategic performance management systems literature was provided in addition to identifying how the strategic performance management development cycle is used to establish the strategic performance management system (de Waal 2013). The literature indicates that strategic performance management systems are linked with improved firm performance.

2.2.4. Conclusion

Section 2.2 defined and discussed *strategic performance management* and its importance from the literature to assist in understanding this domain; and explored the links between strategic management, corporate strategy and *strategic performance management*. *Strategic performance management* is a comprehensive approach that is used to develop, define, continuously redefine and implement the corporate strategy and control the firm's performance to achieve the outcomes required by the strategy (de Waal 2013; de Waal & Kourtit 2013; Franco-Santos et al. 2012; Taticchi et al. 2010; Zamecnik & Rajnoha 2015). *Strategic performance management* is closely linked with strategic management and corporate strategy. The scope of this research study also focuses on the *supply chain performance management* domain and supply chain related gaps in the extant literature regarding *strategic performance management* were identified. The extant literature reviewed regarding *strategic performance management* made very little reference to supply chain. Both domains are widely recognised in the literature for assisting firms to achieve a competitive advantage, but the *strategic performance management* literature largely ignored the role of supply

chain (especially suppliers) in helping a firm to manage performance, be competitive and achieve a competitive advantage. The extant literature reviewed regarding strategic management and *strategic performance management* also completely excluded mention of 'supply chain strategy', especially where it fits in relation to the corporate strategy.

The review of the literature also explored and discussed corporate strategy cascading, strategy cascading approaches and the role of strategic performance management systems. There is limited empirical research focusing on corporate strategy cascading and no literature was discovered regarding how top performing B2B firms in Australia implement corporate strategy cascading. The strategic performance management systems literature review firmly linked the systems with corporate strategy implementation and with improved firm performance. This research study chose to apply an in-depth focus on the *strategic performance management* domain because the literature indicates a strong linkage with corporate strategy development, strategy implementation and firm performance, areas which are also significantly important to the *supply chain performance management* domain. The next section explores the *supply chain performance management* domain.

2.3. Supply Chain Performance Management

Competitive supply chains provide better value to customers and this is achieved by enhancing firm performance through integrated supply chain functions (Al-Shboul et al. 2017). In today's challenging and disruptive global markets, with competitive pressures constantly increasing, organisations are in search of innovative ways to increase effectiveness, efficiency and resilience, while improving the management of complexity within supply chains (Ramezankhani et al. 2018; Um et al. 2018; Wankhade & Kundu 2018). *Supply chain performance management* has paved the way to enhance supply chain performance by monitoring and improving the effectiveness of supply chain strategies to achieve a competitive advantage (Ramezankhani et al. 2018; Roh et al. 2014; Stefanovic 2014). As the scope of this research study also investigates and explores the *supply chain performance management* domain, it is appropriate to review the relevant literature. This section defines *supply chain performance management* and discusses its importance; explores the links between

strategic management, corporate strategy, supply chain and *supply chain performance management*; and explores links with corporate strategy cascading.

2.3.1. Importance of Supply Chain Performance Management

To assist in understanding the *supply chain performance management* domain, definitions and its importance are provided from the literature and discussed. Researchers agree that the supply chain is a firm's greatest driver of competitiveness (Bolstorff & Rosenbaum 2012; Deshpande 2012; Gonzalez-Loureiro et al. 2015; Lambert et al. 2010; Lambert 2014; Ramezankhani et al. 2018). Cohen and Roussel (2013, p. xi) also state that the 'supply chain provides a vital source of competitive differentiation' and should be viewed as a strategic asset. The definition adopted by this research study for supply chain is defined by García-Alcaraz et al. (2019, p. v) as 'a system of organizations, people, activities, information and resources involved in moving a product or service from supplier to customer'. They view the supply chain as a 'complex and dynamic network of partners' where supply chain activities transform 'natural resources, raw materials and components into a finished product that is delivered to an end customer' (García-Alcaraz et al. 2019, p. v). The definition adopted by this research study for supply chain management is defined by The Global Supply Chain Forum (cited in Lambert 2014, p. 2) as the 'management of relationships in the network of organisations, from end customers through original suppliers, using key cross-functional business processes to create value for customers and other stakeholders'. This end-to-end supply chain view for B2B firms presents challenges for *supply chain performance management* which focuses on driving the supply chain performance of the focal firm and its supply chain partners. Stefanovic (2014) explains that the business environment of the twenty-first century is fraught with the growing demands of customers and growing competition, with increased pressure to reduce costs and cycle times. To address the challenges of the business environment, B2B firms use *supply chain performance management* to manage and influence the performance of the supply chain. Also known as supply chain performance improvement (Cai et al. 2009), improvement in supply chain performance (Bolstorff & Rosenbaum 2012), and supply chain management performance (Deshpande 2012), the definition adopted by this research study for *supply chain performance management* is defined by Wankhade and Kundu (2018, p. 219) as:

> the continuous process of selecting, implementing, monitoring and revising the measures and metrics to evaluate the performance of supply chain function in order to take decisions at operational, tactical as well as strategic levels particularly in aligning with [the] firm's strategy, goals and objectives.

Supply chain performance management is widely used to measure and evaluate the performance of a firm and its supply chains, to develop performance improvement plans, and to achieve and sustain the firm's competitiveness (Cohen & Roussel 2013; Deshpande 2012; Hofmann 2010; Hwang 2010; Ramezankhani et al. 2018). Researchers across the extant literature argue that evaluating and assessing the effectiveness and health of the supply chain is possible when using the right metrics to drive performance (Cecere 2015; Cohen & Roussel 2013; Elrod et al. 2013; Hwang 2010; Kim et al. 2010; Stefanovic 2014; Wankhade & Kundu 2018). Stefanovic (2014, p. 3) explains that the goals of *supply chain performance management* is 'business process optimization through monitoring and analysis of key performance indicators' and 'to help decision makers better manage, plan, understand, and leverage their performance' (Stefanovic 2014, p. 14). Elrod et al. (2013) argue that firms should select supply chain metrics that support the firm's performance and align with the strategy. Supply chain metrics are used as leading indicators to measure supply chain performance, including the performance of the focal firm and its supply chain partners, to help B2B firms to correct performance to prevent crises from occurring (Cohen & Roussel 2013). For example, orders delivered late to customers can tarnish a firm's reputation and can prevent repeat business from customers, impacting future sales and revenue (Cohen & Roussel 2013). The visibility of supply chain information can help to identify orders that may be delivered late, hence enabling the firm to implement proactive corrective actions to prevent late deliveries to customers, thereby preventing negative impacts to repeat business, future sales and revenue (Cohen & Roussel 2013; Elrod et al. 2013; Gandhi et al. 2017; Gorane & Kant 2017; Stefanovic 2014; Wankhade & Kundu 2018).

By using measurable goals, B2B firms can make timely decisions and implement timely actions by tracking metrics (Elrod et al. 2013; Khan & Yu 2019; Stefanovic 2014). Cohen and Roussel (2013, p. 173) state that 'it is managing performance that effects performance change' whereas 'measuring performance provides only

visibility'. Implementation of the supply chain performance management process is considered effective when the firm's objectives, performance targets and supply chain performance targets are achieved, including financial and non-financial targets (Cohen & Roussel 2013; Cook et al. 2011; Gandhi et al. 2017; Gorane & Kant 2017; Wankhade & Kundu 2018). Firms that are meeting their performance objectives and are identified as 'best-in-class' have a competitive advantage. Best-in-class is an 'organization, usually within a specific industry, recognized for excellence in a specific process area' (Khan & Yu 2019, p. 307). To establish a best-in-class firm with world-class supply chain management, Cohen and Roussel (2005, p. 188) explain that the *supply chain performance management* approach needs to include: (a) supply chain metrics that are balanced, comprehensive, linked to the corporate strategy, highly visible, monitored at all organisation levels, supported by planned implementation and used for continuous improvement; and (b) supply chain targets that are aggressive and achievable and are set based on internal and external benchmarks.

There is consensus across the extant literature that improving supply chain performance is key to gaining a competitive advantage (Cohen & Roussel 2013; Cook et al. 2011; Deshpande 2012; Gandhi et al. 2017; García-Alcaraz et al. 2019; Gorane & Kant 2017; Lambert 2014; Ramezankhani et al. 2018; Stefanovic 2014; Wagner & Kemmerling 2014; Wankhade & Kundu 2018). The supply chain performance management process is used to control and manage the complexity of the supply chain, and deals with tracking performance against targets to identify and pinpoint supply chain improvement opportunities to support the firm's strategic objectives (Cohen & Roussel 2013; Wankhade & Kundu 2018). The supply chain is largely known for its complexity due to variation in product and service offerings, supply chain configuration, processes and systems (Cohen & Roussel 2013; García-Alcaraz et al. 2019; Wankhade & Kundu 2018). Supply chain configuration decisions impact supply chain performance effectiveness and efficiency however the merging of supply chain configuration and supply chain performance 'streams of research is not full employed' (Sabri et al. 2017, p. 52). Supply chain configuration concerns the decisions and changes made at a network level regarding the network structure, inbound and outbound logistics within the network, suppliers, and geographical locations and functions of supply chain units including manufacturing (Chandra & Grabis 2016). The definition adopted by this research study for supply chain configuration is defined

by Chandra and Grabis (2016, p. 28) as ‘a set of supply chain units and links among these units defining the underlying supply chain structure and the key attributes of the supply chain network’. PwC's benchmarking firm Performance Measurement Group (PMG) which is based in the United States of America (USA), point out that if complexity is managed well, it is a ‘source of significant competitive advantage’ and best-in-class firms were shown to manage complexity better than their peers (Cohen & Roussel 2013, p. 214).

PMG explain that ‘superior supply chain performance is directly correlated with superior financial performance’ (Cohen & Roussel 2013, p. xi). The advantages of being a best-in-class firm in comparison to their peers include: better financial results, approximately 50 percent higher average annual sales growth, 20 percent higher profitability, 50 percent higher asset turnover, 15 percent lower supply chain management costs, at least 60 percent shorter cash-to-cash cycle time (that is from the time money is spent to the time revenue is earned), hold two to three times less inventory, can respond to increased demand six times faster and serve customers on time more often (Cohen & Roussel 2013, pp. 214-7). Um et al. (2018) found that a firm’s cost leadership strategy is negatively impacted by high product variety. Best-in-class firms achieve higher performance results than their peers by having 50 percent less saleable items due to maintaining a smaller range of products and services, they have closely integrated cross-functional processes, advanced supply chain processes and practices, integrated supply chains with suppliers and customers, and serve customers with a higher degree of accuracy (Cohen & Roussel 2013, pp. 223-4; Khan & Yu 2019). A firm’s performance and the performance of its supply chain partners can improve when using integrated supply chain practices and processes with suppliers and customers (Cook et al. 2011; Enz & Lambert 2012; Gandhi et al. 2017; Gorane & Kant 2017; Lambert 2010; Lambert & Schwieterman 2012; Lambert et al. 2010; Lambert 2014; Wankhade & Kundu 2018).

In their research, Söderberg and Bengtsson (2010) discovered a strong link between supply chain management maturity and supply chain performance with increased maturity leading to higher overall supply chain performance; and also discovered a link between supply chain management maturity and financial performance (Söderberg & Bengtsson 2010). Their research used the Supply Chain Management

Maturity model created by Lockamy and McCormack (2004) which is based on the same Supply Chain Operations Reference (SCOR) model as used by PMG for benchmarking supply chain performance and used by best-in-class firms to establish best practice supply chain management processes (Cohen & Roussel 2013; Söderberg & Bengtsson 2010). The SCOR model 'links business processes, performance metrics, practices, and people skills into a unified structure' (APICS 2019) and is a cross-industry cross-functional framework that is widely used to improve supply chain management practices, supply chain performance and firm performance (Alomar & Pasek 2014; Camman et al. 2017; Cvetic & Vasiljevic 2012; Khan & Yu 2019; Kocaoğlu et al. 2013; Stefanovic 2014; Wankhade & Kundu 2018). Discussion regarding best-in-class firms ignites interest by this research study in top performing B2B firms in Australia. The top 1000 performing firms in Australia on IBISWorld's 2017 top 1000 list, accounted for almost one-third of all trade in Australia and close to A$2 trillion in revenue (Aravanis 2019). However, limited empirical research was found that explored *supply chain performance management* at top performing B2B firms in Australia. Much can be learned from executives at top performing B2B firms in Australia regarding the management practices and organisational practices that lead to successful outcomes in performance and competitiveness.

It was discovered that the extant literature that was reviewed regarding *supply chain performance management* made very little mention of *strategic performance management* but did make strategic-level references to firm performance (Alomar & Pasek 2014; Cvetic & Vasiljevic 2012; Elrod et al. 2013; Gandhi et al. 2017; Gorane & Kant 2017; Stefanovic 2014). Supply chain researchers Alomar and Pasek (2014) acknowledge that a firm can achieve a competitive advantage and improvements using *strategic performance management*, but they caution that a firm's approach to performance improvement must reflect the evolution of competition moving from firm level to the supply chain level. This evolution of competition observation by Alomar and Pasek (2014) indicates a limitation of *strategic performance management* because it focuses on firm level performance, whereas *supply chain performance management* focusses on both firm level and supply chain level performance. Limited empirical research is available that links *supply chain performance management* and *strategic performance management*. This section provided definitions for *supply chain performance management* from the literature and discussed its importance to assist

understanding. The next section explores the links between strategic management, corporate strategy, supply chain and *supply chain performance management*.

2.3.2. Links with strategic management and corporate strategy

The previous section provided definitions for *supply chain performance management* from the literature and discussed its importance to assist understanding. This section explores the links between strategic management, corporate strategy, supply chain and *supply chain performance management*. The extant literature regarding *supply chain performance management* provides strong evidence that improvements to supply chain management practices leads to improving the performance of supply chains and the performance of the firm (Al-Shboul et al. 2017; Deshpande 2012; Gandhi et al. 2017; Gorane & Kant 2017; Park et al. 2017; Ramezankhani et al. 2018; Truong et al. 2017). Firms should select supply chain metrics that support the firm's performance and align with its corporate strategy, so as to measure the effectiveness of the supply chain in supporting the corporate strategy (Cohen & Roussel 2013; Elrod et al. 2013). During their review of 3402 articles from top supply chain management journals, Gonzalez-Loureiro et al. (2015, p. 174) report that 'very little SCM [supply chain management] research has focused on SCM as the key element in the firm's strategy'. Hofmann (2010, p. 265) found that the 'linkages between CS [corporate strategy] and SCM [supply chain management] are still largely undiscovered'. Hofmann (2010, p. 265) believes that the 'supply chains' capabilities should be involved in the CS [corporate strategy] formulation and implementation processes' and this is was still found to be a gap in the literature. Presutti and Mawhinney (2007, p. 34) argue that there is a 'disconnect between what's driving supply chain executives and what's driving their corporate bosses—a misalignment of strategic vision and execution'. Researchers have observed that supply chain management personnel are rarely involved in strategic level planning at the highest level of the organisation, identifying a disconnect between strategic management and supply chain management (Deshpande 2012; Hofmann 2010; Hwang 2010). Sandberg and Abrahamsson (2010) and Wagner and Kemmerling (2014) emphasise that little is known about top management's supply chain-related role and whether supply chain management executives play a role in top management teams to improve firm performance, which are significant gaps in the literature. There are also numerous barriers for *supply chain performance management* including lack of awareness, 'inadequate strategic planning', 'lack of top management dedication'

and lack of appropriate implementation (Katiyar, cited in Wankhade & Kundu 2018, p. 224).

Strategic elements of supply chain are considered in the practice of strategic supply chain management (Gonzalez-Loureiro et al. 2015). Hult et al. (2007) reflect that strategic supply chain management is a valuable strategic tool and a competitive weapon that B2B firms use to enhance key outcomes and gain competitive advantage, not just move products from A to B. The mutual union between strategic business customers and strategic suppliers creates significant competitive advantages for each party where, together, they can achieve substantial benefits that they could not have achieved by working alone (Cohen & Roussel 2013; Hwang 2010; Lambert et al. 2010). The definition adopted by this research study for strategic supply chains is defined by Hult et al. (2004, p. 241) as supply 'chains whose members are strategically, operationally, and technologically integrated'. Strategic supply chain management includes identifying improvement opportunities within strategic supply chains by establishing and managing strategic supply chain relationships through collaboration or partnership (Cohen & Roussel 2013; Hwang 2010; Lambert et al. 2010; Sandybayev 2017). Inter-firm strategic supply chain relationships achieve superior supply chain performance results, and collaborations and partnerships provide substantial opportunity for value co-creation for each partner to benefit and achieve greater competitive advantage (Cohen & Roussel 2013; Enz & Lambert 2012; Gonzalez-Loureiro et al. 2015; Kohtamäki & Rajala 2016; Lambert & Schwieterman 2012; Lambert 2014). Driven by the identification of substantial mutual opportunities, the formation of a strategic supply chain partnership is one of the most competitive strategies a B2B relationship can establish (Lambert 2014). A supply chain partnership requires alignment and written agreement regarding strategic objectives that will deliver substantial mutual benefits pertaining to asset/cost efficiencies, service improvements, marketing advantages and profit growth/stability (Enz & Lambert 2012; Lambert 2010; Lambert & Schwieterman 2012; Lambert et al. 2010; Lambert 2014). Cross-functional supply chain management processes allow firms to integrate their processes with strategic business customers and strategic suppliers (Lambert 2014). The Global Supply Chain Forum (GSCF) framework consists of cross-functional supply chain management processes for cross-firm implementation to enhance supply chain performance (Ainapur et al. 2011; Camman et al. 2017; Cvetic

& Vasiljevic 2012; Enz & Lambert 2012; Estampe et al. 2013; Frederico et al. 2019; Lambert 2014; Vanichchinchai 2019; Wankhade & Kundu 2018). The GSCF framework is a widely used 'relationship oriented and process-based supply chain management framework' (Lambert 2014, p. 9). Lambert (2014) states that the two most strategic and important cross-functional supply chain management processes are customer relationship management and supplier relationship management as they provide the structure for the development and maintenance of cross-firm supply chain relationships. Cross-firm supply chain relationship management introduces the concept of cross-functional, cross-firm teams (Lambert et al. 2010; Lambert 2014). Cross-functional, cross-firm teams of strategic business customers and strategic suppliers are integral to profitable B2B relationships (Enz & Lambert 2012). Also, intra-firm relationships between internal stakeholders are also imperative to the success of cross-functional teams and the delivery of cross-functional processes and firm performance (de Waal 2007; Enz & Lambert 2012; Lambert et al. 2010; Lambert 2014). Researchers have identified that more research is required regarding how firms measure supply chain performance and achieve cross-functional alignment (Cuthbertson & Piotrowicz 2011; Deshpande 2012). A supply chain is only as strong as its weakest supply chain member (Ainapur et al. 2011; Charan 2012; Chen & Miller 2011; Paulraj et al. 2017; Sweeney et al. 2015) and the performance of each B2B firm within a strategic supply chain is critical to the performance of the supply chain.

Strategic supply chain management practices include developing, implementing and evaluating the supply chain strategy and ensuring alignment with the corporate strategy (Cohen & Roussel 2013; Hwang 2010). A supply chain strategy is strategy that specifies 'how a firm will achieve its competitive advantages through its supply chain capabilities such as cost efficiency, response speed, and flexibility' (Qi et al. 2011, p. 372). Stefanovic (2014, p. 1) explains that *supply chain performance management* creates 'a consistent relationship between supply chain strategy, planning, implementation, and controlling'. Supply chain strategy is further explored next.

In their definition of *supply chain performance management* which was provided in Section 2.3.1, Wankhade and Kundu (2018, p. 210) label the supply chain as a "supply chain function". They mention that the 'role of the supply chain has evolved

significantly in the last century' (Wankhade & Kundu 2018, p. 210). Wankhade and Kundu (2018, p. 210) report that the role of supply chain has changed from 'cost centre to being the profit centre and from the supporting function to being the business enabler'. In Section 2.2.2, three strategic management levels of organisational strategy formulation were identified including the first-level being the corporate strategy, second-level being the business unit strategy and third-level being the functional strategy (De Kluyver & Pearce 2015). Researchers agree that a supply chain strategy can increase a firm's competitiveness and that it should be linked with and support the corporate strategy, strategic goals and objectives (Cohen & Roussel 2013; Hofmann 2010; Liberatore & Miller 2012; Roh et al. 2014). Bolstorff and Rosenbaum (2012) explain that an effective supply chain strategy incorporates elements including organisational competitive priorities, trading partners, process, technology, and performance. Liberatore and Miller (2012, p. 20) also points out that the 'supply chain strategy should address internal functions, such as manufacturing, inventory control, and procurement, as well as external functions and relationships, including coordination with the firm's channel partners'. The definition adopted by this research study for supply chain strategy is: a strategy that specifies 'how a firm will achieve its competitive advantages through its supply chain capabilities' (Qi et al. 2011, p. 372) within the internal and external environment (Liberatore & Miller 2012) to meet the objectives of the corporate strategy. Um et al. (2018) discovered that when the corporate strategy and the supply chain strategy are aligned regarding the level of product variety, that this is linked to improvement in firm performance. Their research investigated strategic alignment of business strategy between product variety and supply chain and discovered a link at small-to-medium sized firms between low product variety and supply chain cost efficiency and, between high product variety and agile supply chain (Um et al. 2018). Roh et al. (2014, p. 201) elaborates that a supply chain strategy can include four types including: efficient (to achieve highest cost efficiencies), risk-hedging (to share risks), responsive (to rapidly adapt to changes in customer demand) and agile (to increase flexibility). The literature reviewed firmly established the importance of the supply chain strategy and its importance for driving supply chain performance and links the supply chain strategy to *supply chain performance management.* The supply chain strategy is regarded as a third-level functional strategy (Hofmann 2010; Wankhade & Kundu 2018) which was confirmed

by Hofmann (2010, p. 256) whose research reports that 'most of the literature on SCS [supply chain strategy] relates to the functional level'. From the literature review, it is unknown whether corporate strategy includes strategic supply chain elements and whether inclusion would increase the competitiveness of the firm. The literature indicates that implementing the supply chain strategy is a role undertaken by strategic supply chain management and that *supply chain performance management* supports this process by monitoring the effectiveness of the supply chain strategy to support the corporate strategy (Cohen & Roussel 2013; Elrod et al. 2013; Ramezankhani et al. 2018; Roh et al. 2014; Stefanovic 2014). This section explored the links between strategic management, corporate strategy, supply chain and *supply chain performance management.* The next section explores corporate strategy cascading in relation to *supply chain performance management*.

2.3.3. Links with corporate strategy cascading

The previous section explored the links between strategic management, corporate strategy, supply chain and *supply chain performance management.* This section explores corporate strategy cascading in relation to *supply chain performance management*. In Section 2.2.3.1 it was identified that during corporate strategy implementation, top management play a significant role and are relied upon to clearly explain the strategic context of the corporate strategy (De Kluyver & Pearce 2015; Schlickel 2013). However, in the previous Section 2.3.2 the literature reviewed indicated a disconnect between top management and supply chain executives (Presutti & Mawhinney 2007); a disconnect between strategic management and supply chain management (Deshpande 2012; Hofmann 2010; Hwang 2010); that little is known about top management's supply chain-related role and about supply chain executives' role in top management teams (Sandberg & Abrahamsson 2010; Wagner & Kemmerling 2014). Little is known about whether supply chain is a key element in the corporate strategy (Gonzalez-Loureiro et al. 2015; Hofmann 2010) and a 'lack of top management dedication' in *supply chain performance management* was also observed by researchers (Katiyar, cited in Wankhade & Kundu 2018, p. 224). During corporate strategy cascading, strategic alignment to corporate strategy enables improvement firm performance (Prieto & de Carvalho 2011; Ralston et al. 2015; Sardana et al. 2016) and coordination allows the corporate strategy to be dispersed and integrated across the firm (Ralston et al. 2015). Strategic alignment of the supply chain strategy with the

corporate strategy is paramount to increase the firm's competitiveness (Cohen & Roussel 2013; Hofmann 2010; Hwang 2010; Liberatore & Miller 2012; Roh et al. 2014). Camman et al. (2017) claim that strategic alignment is reliant on the expertise of middle managers to ensure that the operational level has correctly implemented strategic decisions. The definition adopted by this research study for strategic alignment is: The facilitation of 'coordinated actions of firm departments and employees, assuring that efforts at work are being directed toward overarching firm goals' (Ralston et al. 2015, p. 50).

In Section 2.2.3.2, strategy cascading approaches were briefly explored including Balanced Scorecard, Hoshin Kanri and organisational structure, and limitations and issues were identified. While the Balanced Scorecard has a strong customer focus, it does not consider suppliers on the scorecard (de Waal 2013) which can indicate a lack of focus on supplier performance management. While little research was available regarding the value creation map created by Marr (2006), value creation is a relevant concept for the *supply chain performance management* domain as firms can increase their value creation through supply chain strategies and can co-create value with strategic supply chain partners (Enz & Lambert 2012; Kohtamäki & Rajala 2016; Lambert & Schwieterman 2012; Lambert et al. 2010; Vijayan et al. 2016). In the literature reviewed there is limited empirical research focusing on corporate strategy cascading and no links identified between corporate strategy cascading and *supply chain performance management*. There is also no research focusing on corporate strategy cascading at top performing B2B firms in Australia, whether supply chain is a key element in corporate strategy and its link to firm performance and supply chain performance, which is a significant research gap. This section explored corporate strategy cascading in relation to *supply chain performance management*.

2.3.4. Conclusion

Section 2.3 defined and discussed *supply chain performance management* and its importance from the literature to assist in understanding this domain. *Supply chain performance management* is used to measure and manage the performance of the firm and its supply chains. Using the right supply chain metrics can measure the effectiveness of the supply chain, can drive supply chain performance, and can be used as leading indicators prevent crises from occurring. The literature identified the

performance successes experienced by best-in-class firms and observed that improving supply chain performance and managing supply chain complexity is key to gaining a competitive advantage. Discussion regarding best-in-class firms ignited interest by this research study in top performing B2B firms in Australia. However, limited empirical research was found that explored *supply chain performance management* at top performing B2B firms in Australia. A conclusion can also be drawn that limited empirical research is available that links *supply chain performance management* and *strategic performance management*.

The links between strategic management, corporate strategy, supply chain and *supply chain performance management* were explored. Improvements to supply chain management improves the performance of the firm and its supply chains. Gaps in the literature reviewed were identified between strategic management and supply chain management and little is known about top management's supply chain-related role and about supply chain's role in top management teams. It is unknown whether corporate strategy includes strategic supply chain elements and whether top management at B2B firms would be able to clearly explain the firm's strategic supply chain requirements during corporate strategy implementation. B2B firms operate in strategic supply chains which consist of long-term relationships with strategic business customers and strategic suppliers. Substantial opportunities, benefits and significant competitive advantages can be gained by establishing successful supply chain collaborations or partnerships that co-create value. The performance of each B2B firm within a strategic supply chain is critical to the performance of the supply chain. Strategic supply chain management is used to manage strategic supply chains, which includes developing and implementing the supply chain strategy and ensuring its alignment with corporate strategy. *Supply chain performance management* monitors the effectiveness of the supply chain strategy to support the corporate strategy.

This section also explored corporate strategy cascading in relation to *supply chain performance management.* In the literature reviewed there is limited empirical research focusing on corporate strategy cascading and no links identified between corporate strategy cascading and *supply chain performance management*. There is also no research focusing on corporate strategy cascading at top performing B2B firms in Australia, whether supply chain is a key element in corporate strategy and its link to

firm performance and supply chain performance, which is a significant research gap. This research study chose to apply an in-depth focus on the *supply chain performance management* domain as it is the primary topic of this research study, the professional background of the Principal Investigator, and this research study seeks to advance the *supply chain performance management* body of knowledge. This research study also seeks to advance the *strategic performance management* body of knowledge as the *strategic performance management* domain is the secondary topic of this research study. The next section defines and explores Dynamic Capabilities Theory and its relevance to the two major domains and presents the theoretical framework that underpins this research study.

2.4. Dynamic Capabilities Theory

Organisations operating in hypercompetitive markets striving to sustain competitive advantage are faced with increasing challenges (Barrales-Molina et al. 2013; Pitelis & Wagner 2019; Torres et al. 2018; Vijaya et al. 2019; Weber & Tarba 2014). To enhance performance and competitiveness in rapidly changing, challenging and competitive business environments, organisations seek to develop unique and difficult-to-replicate dynamic capabilities to achieve long term competitive advantage (Teece 2009; Vijaya et al. 2019). As the scope of this research study investigates and explores two major domains *Strategic Performance Management* and *Supply Chain Performance Management*, it is appropriate to review the theory chosen to investigate this research study. This section defines and explores Dynamic Capabilities Theory and its relevance to the two major domains and presents the theoretical framework that underpins this research study. Dynamic capabilities theory is an approach to strategic management that has been widely researched (Bogers et al. 2019; Teece 2009; Vijaya et al. 2019). Firms that are seeking to achieve and sustain superior enterprise performance must develop dynamic capabilities (Blome et al. 2013; Kleinbaum & Stuart 2014; Li et al. 2015; Pezeshkan et al. 2016; Pitelis & Wagner 2019; Teece 2019; Torres et al. 2018; Vanpoucke et al. 2014; Vijaya et al. 2019). Managers must define and adopt relevant strategic considerations and priorities and develop unique and difficult-to-replicate capabilities to enhance enterprise performance and sustain competitive advantage long term (Teece 2009). Teece (2009, p. 4) posits that ‘enterprises with strong dynamic capabilities are intensely entrepreneurial’. They

achieve and sustain competitiveness by using organisational and managerial innovations and have the capability to learn and to adjust (Teece 2009). Such firms collaborate with other enterprises and use innovation by adapting to and shaping business ecosystems (Teece 2019). Teece (2009, p. 16) describes the business "ecosystem" as the 'community of organizations, institutions, and individuals that impact the enterprise and the enterprise's customers and suppliers'.

Dynamic capabilities 'drive growth, profitability, and survival' (Teece 2009, p. xv) which aligns with the objectives of the two major domains. For analytical purposes, Teece (2009) disaggregated dynamic capabilities into three capacities including **sensing**, **seizing** and **transforming** (or reconfiguring), also known as clusters (Teece 2019) or strategic macrolevel processes (Fallon-Byrne & Harney 2017). The definition adopted by this research study for Dynamic Capabilities Theory is defined by Teece (2009, p. 206) as the 'ability to sense and then seize new opportunities, and to reconfigure and protect knowledge assets, competencies and complementary assets so as to achieve sustained competitive advantage'. Important to this discussion are the microfoundations of dynamic capabilities that can help firms to build, evolve, and develop dynamic capabilities (Fallon-Byrne & Harney 2017). The definition adopted by this research study for microfoundations of dynamic capabilities is defined by Teece (2009, p. 3) as 'the distinct skills, processes, procedures, organizational structures, decision rules, and disciplines—which undergird enterprise-level sensing, seizing, and reconfiguring capacities are difficult to develop and deploy'.

Sensing refers to the capacity to 'sense and shape opportunities and threats' (Teece 2009, p. 4). Sensing and shaping new opportunities requires using entrepreneurial related capabilities including exploring and scanning markets and technologies, learning, investment in research, sensing opportunities for new products, interpreting available information, and sensing opportunities for new processes and services (Teece 2009). Sensing threats requires capabilities to sense competitor threats, emergent technology threats, imitators, sustainability threats, threats to competitive advantages, substitute products or services threats, and capabilities to identify how the firm will be impacted (Khan et al. 2020; Patrício et al. 2019; Suddaby et al. 2019; Teece 2009; Vijaya et al. 2019). The microfoundations of sensing dynamic capabilities include the 'skills, processes, procedures, organizational structures, decision rules, and

disciplines' (Teece 2009, p. 3) that help to build, evolve, and develop these capabilities (Fallon-Byrne & Harney 2017). Sensing capabilities enable firms to detect significant opportunities in the market or new technologies, sense environmental conditions and to detect how customers, suppliers and competitors are responding or shifting, and enable the firm to foresee future events and identify how the firm will be impacted (Kareem & Alameer 2019; Patrício et al. 2019; Teece 2009, 2019). Central to sensing capabilities are 'analytical systems (and individual capacities)' that enable a firm 'to learn and to sense, filter, shape, and calibrate opportunities' (Teece 2009, p. 17). Teece (2009, p. 17) argues that the microfoundations of sensing dynamic capabilities include processes in relation to research and development, selecting new technologies, tapping into supplier innovations, and identifying 'target market segments, changing customer needs, and customer innovation'.

Seizing refers to the capacity to 'seize opportunities' (Teece 2009, p. 4). Seizing opportunities capabilities, that seize the opportunities identified through sensing activities, include developing strategies, mobilising resources, redesigning the business model and strategic planning (Khan et al. 2020; Teece 2007, 2009). While competitors may also seize opportunities, they may do this differently, providing the firm with the opportunity to seize and gain competitive advantage (Khan et al. 2020; Teece 2009). Opportunities can be impacted by customers, suppliers, regulating bodies and governments, which can change the shape of the opportunities and requires the firm to have the capabilities to act quickly within these constraints to seize the opportunities (Teece 2009). The microfoundations of seizing dynamic capabilities include the 'skills, processes, procedures, organizational structures, decision rules, and disciplines' (Teece 2009, p. 3) that help to build, evolve, and develop these capabilities (Fallon-Byrne & Harney 2017). Suddaby et al. (2019, p. 539) claims that 'seizing opportunity rests largely on the ability of the firm to motivate organizational change while maintaining the commitment of key stakeholders'. To take advantage of opportunities the 'firm must mobilize significant financial and human resources' (Suddaby et al. 2019, p. 539) and may also need to overcome resistance to change and rapidly acquire new knowledge (Kareem & Alameer 2019; Khan et al. 2020). Central to seizing opportunities capabilities are strategic decision skills and execution skills that enable a firm to change 'enterprise structures, procedures, designs and incentives for seizing opportunities' (Teece 2009, p. 35). Teece (2009, p. 35) argues that the

microfoundations of seizing dynamic capabilities include ‘delineating the customer solution and the business model’, ‘selecting decision-making protocols’, ‘selecting enterprise boundaries to manage complements and “control” platforms’ and ‘building loyalty and commitment’.

Transforming refers to the capacity to ‘maintain competitiveness through enhancing, combining, protecting, and when necessary, reconfiguring the business enterprise’s intangible and tangible assets’ and resources (Teece 2009, p. 4). This third capacity of dynamic capabilities enable a firm to transform, reconfigure and manage threats to sustain profitable growth, opportunities seized and competitive advantage (Khan et al. 2020; Teece 2009). Suddaby et al. (2019, p. 531) argues that firms can reconfigure by decoupling itself ‘from burdensome routines and practices from the past’. As markets and technology continues to change, and as a firm continues to grow, the firm needs capabilities that enable it to recombine and reconfigure assets, organisational structures, resources and capabilities to sustain its success and maintain competitiveness (Kareem & Alameer 2019; Khan et al. 2020; Suddaby et al. 2019; Teece 2009). Sustaining and maintaining the firm’s success through reconfiguration and redeployment can include transferring assets and capabilities throughout the firm, redesigning the business model, asset realignment, mergers, and acquisitions (Teece 2009). The microfoundations of transforming dynamic capabilities include the ‘skills, processes, procedures, organizational structures, decision rules, and disciplines’ (Teece 2009, p. 3) that help to build, evolve, and develop these capabilities (Fallon-Byrne & Harney 2017). Suddaby et al. (2019, p. 544) posits that a firm can reconfigure at the product level, firm level or competitive market level by accessing and integrating knowledge from sources inside and outside the firm. Teece (2009, p. 37) argues that to sustain dynamic capabilities, not only are top management leadership skills required, but top management need to be ‘closer to new technologies, the customer, and the market’ which requires a decentralised organisational approach. Central to reconfiguration capabilities are combination skills, reconfiguration skills, and asset protection skills for the ‘continuous alignment and realignment of specific tangible and intangible assets’ (Teece 2009, p. 45). Teece (2009, p. 45) argues that the microfoundations of transforming dynamic capabilities include decentralisation, cospecialisation, governance and knowledge management.

Ordinary capabilities and dynamic capabilities. Ordinary capabilities cannot drive superior performance, but they are still necessary and are like building blocks for dynamic capabilities (Mohamud & Sarpong 2016; Pezeshkan et al. 2016; Teece 2014, 2019; Vijaya et al. 2019). Dynamic capabilities can be built by extending, integrating or reconfiguring operational capabilities, while synchronising them with the business environment (Teece 2009; Vijaya et al. 2019). Sardana et al. (2016, p. 131) point out that firms should build 'dynamic operational capability to be responsive to changing market needs'. Even though identified as a key driver of firm-level performance, ordinary capabilities cannot create a sustained competitive advantage and are not sufficient for long term survival and growth (Teece 2009; Vijaya et al. 2019). Dynamic capabilities enable firms to outcompete and outperform their competitors by developing skills that cannot be replicated (Bingham et al. 2015; Li et al. 2015; Martin 2011; Pezeshkan et al. 2016; Teece 2019; Torres et al. 2018). Also known as operational capabilities, or mere technical capabilities (Teece 2009), ordinary capabilities seldom interact with the business environment as they involve daily static routines to deliver products or services (Vijaya et al. 2019; Wang & Ahmed 2007). Ordinary capabilities can include high-level routines, transactional tasks, product manufacturing, basic processes and day-to-day tasks (Vijaya et al. 2019). Tasks are completed with proficiency using ordinary capabilities, however, are done so without reference to customer considerations or competitive considerations (Teece 2009). Dynamic capabilities can exist in a firm's top management leadership skills, organisational processes and tacit knowledge (Kor & Mesko 2013; Teece 2014). Firms with dynamic capabilities make the right decisions to do the right things at the right time by assessing the business environment and invest in technology opportunities, new processes and products that suit that environment (Teece 2009). Dynamic capabilities exhibit characteristics which help to define the capabilities. For example, dynamic capabilities are organisational resources, processes and technologies identified by a firm as valuable, rare, inimitable and non-substitutable (Teece 2014; Vijaya et al. 2019). The characteristic of idiosyncrasy are dynamic capabilities that are difficult to replicate, repeat or reproduce (Vijaya et al. 2019; Wang et al. 2015).

Importance and role of technology. The dynamic capabilities literature strongly emphasises the importance of technology to enable dynamic capabilities due to the accelerating pace of technological change and to outperform competition to achieve

superior firm performance and supply chain performance (Baden-Fuller & Teece 2020; Blome et al. 2013; Chiang et al. 2012; Kleinbaum & Stuart 2014; Li et al. 2015; Mohamud & Sarpong 2016; Pitelis & Wagner 2019; Teece 2019; Torres et al. 2018; Vanpoucke et al. 2014; Vijaya et al. 2019; Wang et al. 2015). Firms can enhance their innovation, performance, competitiveness by building and investing in dynamic capabilities through technological resources to support systems and the firm (Teece 2009; Vijaya et al. 2019). Technology is relevant to both *strategic performance management* and *supply chain performance management* and significantly impacts how the firm and the supply chain operate. Technology is critical for measuring, tracking and managing firm performance and supply chain performance (Stefanovic 2014). Technology-enabled dynamic capabilities are relevant to the *strategic performance management* and *supply chain performance management* domains.

This research study responds to the call for greater research attention to investigate whether other management constructs and complementary fields of enquiry exhibit dynamic capabilities in organisational contexts (Ambrosini & Bowman 2009; Vijaya et al. 2019) and to explore the microfoundations of dynamic capabilities process dimensions of sensing, seizing and transforming (Schilke et al. 2018). The two major domains *Strategic Performance Management* and *Supply Chain Performance Management* are ideal management constructs and complementary fields of enquiry to identify whether dynamic capabilities and microfoundations of dynamic capabilities, are found in organisational contexts relevant to these domains. Limited research is available in the literature reviewed in relation to the sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with corporate strategy formulation with a strategic supply chain focus and corporate strategy cascading to perform as required within strategic supply chains, at top performing B2B firms in Australia. The Dynamic Capabilities Theory was chosen for this research study due to its strong links with strategic management, competitive advantage, superior performance and its internal view of the firm and external supply chain view of the business environment, and its relevance to the two major domains. Achieving a competitive advantage is substantially important for the two major domains. The *strategic performance management* domain widely recognises the importance for a firm to be competitive and achieve a competitive advantage (Adler 2011; Adler 2018; de Waal 2013; de Waal & Kourtit 2013; Franco-Santos et al. 2012;

Omalaja & Eruola 2011). The extant supply chain literature also recognises that improving *supply chain performance management* is key to gaining a competitive advantage (Deshpande 2012; Gandhi et al. 2017; García-Alcaraz et al. 2019; Gorane & Kant 2017; Lambert 2014; Ramezankhani et al. 2018; Stefanovic 2014; Wagner & Kemmerling 2014; Wankhade & Kundu 2018). This section defined and explored Dynamic Capabilities Theory and its relevance to the two major domains *Strategic Performance Management* and *Supply Chain Performance Management.* The next section presents the theoretical framework that underpins this research study.

2.4.1. Theoretical framework

A detailed literature review of the two major domains *Strategic Performance Management* (Section 2.2) and *Supply Chain Performance Management* (Section 2.3) identified gaps in the literature. The previous section defined and explored Dynamic Capabilities Theory and its relevance to the two major domains. This section presents the theoretical framework that underpins this research study. **Figure 2.2** demonstrates the theoretical framework which is based on the two major domains, the Dynamic Capabilities Theory, and the concepts relevant to this research study. The theoretical framework supports the identification of the research problem (Section 1.3.1), what is known from prior research, what is unknown (gaps in the literature and research issues), and will inform and guide data collection and data analysis. As identified in **Figure 2.2**, the theoretical space for this research study is at the intersection of the *strategic performance management* domain and the *supply chain performance management* domain, where the Dynamic Capabilities Theory will play a key role in exploring the research issues to help facilitate the resolution of the research problem. Much can be learned from executives at top performing B2B firms regarding management practices and organisational practices that lead to successful outcomes in performance and competitiveness. The most significant research gap identified from the literature review is the lack of research focusing on corporate strategy cascading at top performing B2B firms in Australia, whether supply chain is a key element in corporate strategy and its link to firm performance and supply chain performance. This research gap led to the development of the research problem, that was first presented in Section 1.3.1: *How do executives at top performing B2B firms in Australia form and cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains?*

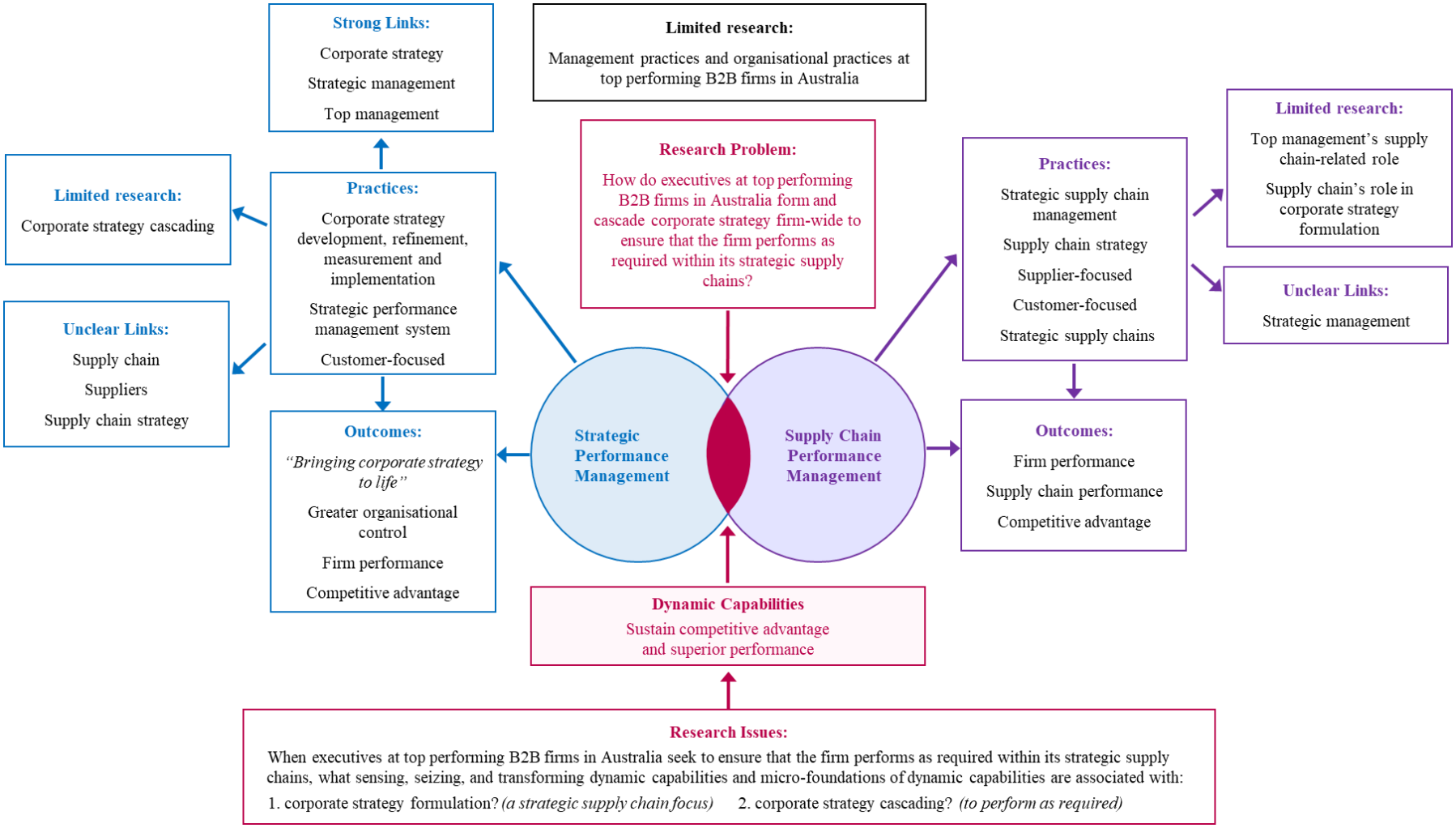

Figure 2.2: Theoretical Framework

Little is known about strategy cascading approaches suitable for successful corporate strategy cascading and its link to supply chain performance. The literature reviewed regarding strategy cascading approaches found little literature which addressed how top performing B2B firms in Australia implement corporate strategy cascading. The extant literature reviewed regarding *strategic performance management* made very little reference to supply chain and excluded mention of supply chain strategy. In contrast, the extant literature reviewed regarding *supply chain performance management* made very little mention of *strategic performance management* but did make strategic-level references to firm performance.

The literature review identified limited research that explored a direct link between supply chain and a firm's strategic level management, and linkages between corporate strategy and supply chain management. Little is known about top management's supply chain-related role and the role of supply chain in top management teams to improve firm performance (Sandberg & Abrahamsson 2010; Wagner & Kemmerling 2014). Top management play a significant role in strategy implementation and are relied upon to clearly explain the strategic context of the corporate strategy (De Kluyver & Pearce 2015; Schlickel 2013). However, from the literature reviewed it is unknown whether corporate strategy includes strategic supply chain elements.

The two major domains are widely recognised in the literature for assisting firms to achieve a competitive advantage, but the *strategic performance management* literature largely ignored the role of supply chain (especially suppliers) in helping a firm to manage performance, be competitive and achieve a competitive advantage. The *strategic performance management* domain plays a major role in firm performance, but researchers did not elaborate on its role in managing supply chain performance. There is limited empirical research available that links *supply chain performance management* and *strategic performance management* or their link to top performing B2B firms in Australia. The concept of strategic supply chains is important to this research study as B2B firms operates in strategic supply chains with strategic business customers and strategic suppliers, and these relationships impact the performance of the supply chain. A supply chain is only as strong as its weakest supply chain member (Ainapur et al. 2011; Charan 2012; Chen & Miller 2011; Paulraj et al. 2017; Sweeney

et al. 2015) and the performance of each B2B firm within a strategic supply chain is critical to the performance of the supply chain.

The Dynamic Capabilities Theory will play a key role to help facilitate the resolution of the research problem. The Dynamic Capabilities Theory will be used to explore two research issues, that were first presented in Section 1.3.2, by identifying the sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with: (1) corporate strategy formulation – *a strategic supply chain focus*; (2) corporate strategy cascading – *to perform as required*; when executives at top performing B2B firms in Australia are seeking to ensure that the firm performs as required within its strategic supply chains. This section presented the theoretical framework that underpins this research study. The next section concludes Section 2.4.

2.4.2. Conclusion

Section 2.4 defined and explored Dynamic Capabilities Theory and its relevance to the two major domains and presented the theoretical framework that underpins this research study. As the scope of this research study investigates and explores two major domains *Strategic Performance Management* and *Supply Chain Performance Management*, it was appropriate to review the theory chosen to investigate this research study. Dynamic capabilities are unique and difficult-to-replicate and are used to enhance enterprise performance and sustain competitive advantage (Blome et al. 2013; Kleinbaum & Stuart 2014; Li et al. 2015; Pezeshkan et al. 2016; Pitelis & Wagner 2019; Teece 2019; Torres et al. 2018; Vanpoucke et al. 2014; Vijaya et al. 2019). The Dynamic Capabilities Theory was chosen for this research study due to its strong links with strategic management, competitive advantage, superior performance and its internal view of the firm and external supply chain view of the business environment. Achieving a competitive advantage is substantially important for the two major domains. Teece (2009) disaggregated dynamic capabilities into three capacities including sensing, seizing and transforming, however it is the microfoundations of dynamic capabilities that help firms to build, evolve, and develop dynamic capabilities (Fallon-Byrne & Harney 2017). The dynamic capabilities literature strongly emphasises the importance of technology to enable dynamic capabilities due to the accelerating pace of technological change and to outperform competition to achieve

superior firm performance and supply chain performance, and technology is very important to the two major domains (Baden-Fuller & Teece 2020; Blome et al. 2013; Chiang et al. 2012; Kleinbaum & Stuart 2014; Li et al. 2015; Mohamud & Sarpong 2016; Pitelis & Wagner 2019; Teece 2019; Torres et al. 2018; Vanpoucke et al. 2014; Vijaya et al. 2019; Wang et al. 2015).

A theoretical framework that underpins this research study was presented in Section 2.4.1, which was based on the two major domains, the Dynamic Capabilities Theory and the concepts relevant to this research study. The two major domains are ideal management constructs and complementary fields of enquiry to identify whether dynamic capabilities and microfoundations of dynamic capabilities, are found in organisational contexts relevant to these domains. The theoretical framework supports the identification of the research problem, what is known from prior research and what is unknown. The Dynamic Capabilities Theory will play a key role in addressing the research problem and research issues. This research study seeks to address an important research gap in relation to the lack of research focusing on corporate strategy cascading in top performing B2B firms in Australia, whether supply chain is a key element in corporate strategy and its link to firm performance and supply chain performance, by using a theoretical framework to inform and guide data collection and data analysis. The next section concludes the literature review.

2.5. Summary

This chapter reviewed existing research relevant to the two major domains *Strategic Performance Management* and *Supply Chain Performance Management*, to gain an understanding and to identify gaps in the literature that may require investigation. *Strategic performance management* was discussed and defined, and links were explored between strategic management, corporate strategy, and *strategic performance management*. Corporate strategy cascading was explored and discussed, in addition to strategy cascading approaches and the role of strategic performance management systems. *Supply chain performance management* was defined and discussed, and links were explored between strategic management, corporate strategy, supply chain and *supply chain performance management*. Corporate strategy cascading was explored in relation to *supply chain performance management*. Dynamic Capabilities Theory was defined and its relevance to the two major domains

was explored, and the theoretical framework that underpins this research study was presented. The next chapter provides a detailed account of the research design and methodology guiding and shaping the research.

CHAPTER 3: METHODOLOGY

3.1. Introduction

Chapter 1 provided a background to the research and an overview of the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* relevant to this research study. Gaps in the literature were highlighted and the research problem was introduced. The relevance of the Dynamic Capabilities Theory was discussed, and the research issues were introduced. The scope of the research and delimitations were outlined, and an overview of the research methodology was provided. The structure of the thesis was outlined, and key terms and concepts were defined.

Chapter 2 presented a detailed review of the literature related to the two major domains *Strategic Performance Management* and *Supply Chain Performance Management*, and the Dynamic Capabilities Theory. *Strategic performance management* was defined, and its importance discussed; the links between strategic management, corporate strategy, and *strategic performance management* were explored; and corporate strategy cascading, strategy cascading approaches and the role of strategic performance management systems were explored and discussed. *Supply chain performance management* was defined, and its importance discussed; the links between strategic management, corporate strategy, supply chain and *supply chain performance management* were explored, as were the links with corporate strategy cascading. The Dynamic Capabilities Theory was defined and explored, as well as its relevance to the two major domains. The theoretical framework that underpins this research study was presented.

3.1.1. Objective of the chapter

The objective of this chapter is to provide a detailed account of the research design and methodology guiding and shaping the research. Section 3.2 justifies the selection of the interpretivism paradigm and Section 3.3 justifies the exploratory purpose of the research and, reiterates the research problem and research issues and outlines the stages of the research design. Section 3.4 justifies the exploratory qualitative in-depth research strategy, and Sections 3.5, 3.6 and 3.7 outline the research methodology used to select and recruit research participants and to collect and analyse the data. Section

3.8 addresses the quality and trustworthiness of the methodology and Section 3.9 outlines ethical considerations and Section 3.10 provides a summary of this chapter. **Figure 3.1** depicts the third chapter and its 10 sections.

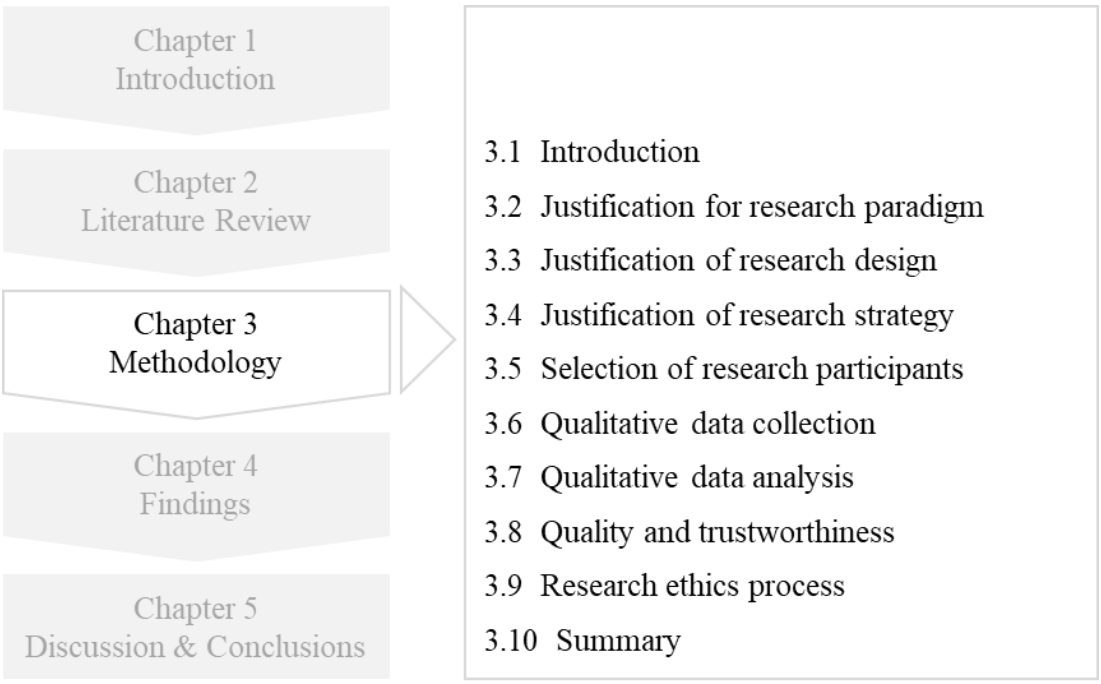

Figure 3.1: Outline of Chapter 3

3.2. Justification for research paradigm

The **interpretivism paradigm** was selected for this exploratory qualitative research study, and this section justifies the selection of this paradigm. There are four categories of scientific paradigms: positivism, realism, critical theory and interpretivism (Guba & Lincoln 1994; Maxwell 2005; Saunders et al. 2009; Schwartz-Shea & Yanow 2012). **Table 3.1** examines the suitability of each scientific paradigm to this research study and concludes that **interpretivism is the most suitable paradigm.**

Table 3.1: Review of four categories of scientific paradigms

	Paradigm			
Element	**Positivism**	**Realism**	**Critical theory**	**Interpretivism**
Ontology: *the researcher's view of the nature of reality or being*	External, objective and independent of social actors	Is objective. Exists independently of human thoughts and beliefs or knowledge of their existence (realist), but is interpreted through	A reality, over time, shaped by social, political, cultural, economic, ethnic, and gender factors, then crystallized into structures that are taken as "real", a	Socially constructed, subjective, may change, multiple, holistic, contextual

Element	Paradigm			
	Positivism	**Realism**	**Critical theory**	**Interpretivism**
		social conditioning (critical realist)	virtual or historical reality.	
Epistemology: *the researcher's view regarding what constitutes acceptable knowledge*	Only observable phenomena can provide credible data, facts. Focus on causality and law like generalisations, reducing phenomena to simplest elements.	Observable phenomena provide credible data, facts. Focus on explaining within a context or contexts.	Transactional and subjectivist. The investigator and the investigated object are assumed to be interactively linked. Findings are value mediated.	Subjective meanings and social phenomena. Focus upon the details of situation, a reality behind these details, subjective meanings motivating actions. Context-dependent.
Data collection techniques most often used	Highly structured, large samples, measurement, quantitative, but can use qualitative.	Methods chosen must fit the subject matter, quantitative or qualitative	Dialogic and dialectical. The transactional nature of inquiry requires a dialogue between the investigator and the subjects of the inquiry.	Small samples, in-depth investigations, qualitative
Suitability to this research study	**Not suitable** because this research study is not testing theory or verifying hypotheses or measuring independent facts about reality	**Not suitable** because this research study cannot be conducted independently of human thoughts and beliefs or studied through scientific methods due to the complexity of the phenomena being investigated.	**Not suitable** because this research study is not seeking a virtual or historical view of reality nor is it seeking to promote social change	**Suitable** because this research study seeks to understand the complex business world of the industry experts from their point of view and experience and interpret it by building a framework of multiple realities.

(Source: Adapted from Darby et al. 2019, p. 398; Guba & Lincoln 1994, p. 112; Saunders et al. 2009, p. 119; Schwartz-Shea & Yanow 2012)

The **positivism paradigm** is not suitable for this research study because the findings in this research study cannot be statistically generalised to a population identified by the Principal Investigator (and this is the main limitation of this research study). The research findings in this project are not representative of the population of industry experts and executive perceptions, top performing firms in Australia, any industry sector, firm size, or location. Positivists study reality through scientific methods as they believe that observable phenomena will provide credible data using research methods that distance them from research participants to remain objective, and to avoid influencing participants and being influenced (Guba & Lincoln 1994; Saunders et al. 2009). The positivism paradigm also requires verification of hypotheses and testing of theory (Guba & Lincoln 1994; Saunders et al. 2009; Schwartz-Shea & Yanow 2012), however this research study did not test theory or verify hypotheses.

The **critical theory paradigm** is not suitable for this research study because this research study did not seek a virtual or historical view of reality (Guba & Lincoln 1994). The Principal Investigator did not seek to change the social world within which research participants live, which is a goal of critical theory paradigm (Guba & Lincoln 1994). The **realism paradigm** is not suitable for this research study because realists believe that the nature of reality is objective and that it exists independently of human thoughts and should be studied through scientific methods (Guba & Lincoln 1994; Saunders et al. 2009). This research study sought to understand the complex business world of the research participants from their point of view, where the nature of reality is subjective and contextual, which aligns with the **interpretivism paradigm** (Darby et al. 2019; Guba & Lincoln 1994; Saunders et al. 2009; Schwartz-Shea & Yanow 2012).

The **interpretivism paradigm** is suitable for this qualitative research study because this study explores the opinions and perspectives of the research participants about their experience with corporate strategy alignment at B2B firms to ensure that the firm performs as required within its strategic supply chains. The axiological goal of this interpretive research study is to gain an empathetic understanding about the research problem (Section 3.3.2) and relies on analysing and interpreting the research participants' experience at top performing B2B firms in Australia as the study is context-dependent (Darby et al. 2019; Sandberg 2005). Interpretivists believe that the nature of reality is socially constructed, subjective and is constantly changing (Darby et al. 2019; Guba & Lincoln 1994; Sandberg 2005; Saunders et al. 2009; Schwartz-Shea & Yanow 2012). By gaining a greater understanding of the complex business world in which the research participants live and work, enables this research study to build a framework of multiple realities (Darby et al. 2019; Guba & Lincoln 1994; Saunders et al. 2009) to identify the dynamic capabilities and microfoundations of dynamic capabilities associated with the research issues to help facilitate resolution of the research problem (Section 3.3.2). An interpretive approach is an ideal research paradigm for supply chain management-based research studies as discovered by Darby et al (2019) and widely used for management and organisational research studies as argued by Sandberg (2005). The interpretivism paradigm was considered appropriate for this research study.

3.3. Justification of research design

The previous section examined the suitability of four scientific paradigms to this research study and justified the selection of the interpretivism paradigm. This section discusses the research purpose, reiterates the research problem and research issues, and outlines the stages of the research design.

3.3.1. Exploratory research purpose

As some studies have multiple purposes, the purpose of research can be categorised as exploratory, descriptive or explanatory (Neuman 2003; University of Southern Queensland 2013). Exploratory research explores what is happening and 'how', and enables a researcher to discover new insights where little is known (Saunders et al. 2009). Descriptive research describes 'how', and extends upon exploratory research allowing the researcher to describe a social phenomenon (Neuman 2003). Explanatory research explains 'why', and extends both exploratory and descriptive research to identify the reasons for and causes of a phenomenon (Neuman 2003, p. 31).

The purpose of this exploratory qualitative research study is to investigate the perceptions of purposefully selected industry experts regarding how they believe top performing B2B firms in Australia in strategic supply chain relationships, achieve strategic performance alignment so that the firm performs as required within its strategic supply chains. From the surveyed literature, little is known, and few research studies investigate how top performing firms in Australia form and cascade their corporate strategy across the firm and how this strategic alignment ensures that the firm will perform as required. The exploratory nature of this interpretative research study includes a literature review to identify issues discovered by prior research (Schwartz-Shea & Yanow 2012), and a qualitative in-depth study to explore the research issues and address the research problem. The research design of this study follows two stages which are presented in Section 3.3.3.

3.3.2. Research problem and research issues

Section 1.3.1 and Chapter 2 highlighted gaps in the literature reviewed regarding the two major domains *Strategic Performance Management* (Section 2.2) and *Supply Chain Performance Management* (Section 2.3) and justified how the research problem was established. The research problem: *How do executives at top performing B2B*

firms in Australia form and cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains?, is the general area of focus for this research study (Corbin & Strauss 2008; Strauss & Corbin 1998).

Section 1.3.2 and Section 2.4 justified the relevance of the Dynamic Capabilities Theory to this research study and justified how the research issues were established. The research problem was dissected into two research issues, where each issue relates to a set of dynamic capabilities and microfoundations of dynamic capabilities, in terms of the process dimensions of sensing, seizing, and transforming, to help resolve the research problem:

> **When executives at top performing B2B firms in Australia seek to ensure that the firm performs as required within its strategic supply chains, what sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with:**
>
> **1. corporate strategy formulation?** *a strategic supply chain focus*
>
> **2. corporate strategy cascading?** *to perform as required*

Research Issue 1 seeks to explore and understand from the perspective of executives, the strategic supply chain considerations of B2B firms during corporate strategy formulation to ensure that the firm performs as required within its strategic supply chains; and to identify dynamic capabilities and microfoundations of dynamic capabilities associated with this process. Research Issue 2 seeks to explore and understand from the perspective of executives, how corporate strategy cascading is conducted at their B2B firms to ensure that the firm performs as required within its strategic supply chains; and to identify dynamic capabilities and microfoundations of dynamic capabilities associated with this process. The research problem and research issues provided the basis of the open-ended in-depth questions (**Appendix A.** Research Issue 1: Set 1; Research Issue 2: Sets 2-7) and structure for the data analysis. The next section outlines the stages of the research design employed by this research study.

3.3.3. Stages of research design

Table 3.2 outlines the stages of the research design employed by this research study. In fitting with interpretivism research, the design of the research was flexible

(Saunders et al. 2009). During the first stage, the research problem and research issues (Section 3.3.2) were determined after an investigation of the literature. The next step during stage one included justifying the interpretivism research paradigm and the exploratory qualitative in-depth study. The research methodology approach was developed, and the interview protocol was finalised, and ethics approval obtained. The second stage included using purposeful criterion sampling (Patton 2002; Suri 2011) to select and recruit research participants, followed by data collection using exploratory semi-structured in-depth interviews, and access to an open-text open-ended in-depth questionnaire was also provided (further discussed in Section 3.6). Recorded interviews were transcribed and verified by research participants (Saunders et al. 2009). Data were analysed by research issue through thematic analysis, with the aid of NVivo, then data were interpreted, and dynamic capabilities and microfoundations of dynamic capabilities associated with the research issues were identified.

Table 3.2: Stages of research design

Stage	**Method**	**Research study approach**
Stage 1	**Literature Review** Chapter 2	Conduct literature review about *strategic performance management*, *supply chain performance management* and Dynamic Capabilities Theory Determine research problem and research issues Establish theoretical framework
	Methodology Chapter 3	Provide justification for research paradigm and research design Develop research methodology approach including: • Research participant selection and recruitment process • Research participant selection criteria (purposeful criterion sampling strategy) • Interview protocol • Semi-structured open-ended in-depth questions • Data collection methods and data analysis approach Obtain ethics approval
Stage 2	**Qualitative Data Collection** Chapter 3	Search, investigate select and recruit research participants based on purposeful criteria Obtain participation consent from research participants Conduct exploratory semi-structured in-depth interviews and provide access to the semi-structured open-ended in-depth questions via open-text questionnaire and retrieve data
	Qualitative Data Analysis of Findings Chapter 4	Transcribe recorded interviews and verify with research participants Analyse data by research issue through thematic analysis, with the aid of NVivo Data interpretation Identify sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities

3.4. Justification of research strategy

The previous section justified the exploratory purpose of this research study, and presented the research problem and research issues, and outlined the stages of the research design. This and the subsequent sections justify the research strategy and methodology employed in this research study, thus explaining how data was acquired and interpreted in relation to the research problem after the data was collected and analysed (University of Southern Queensland 2013, p. 46). The interpretative paradigm, which requires the adoption of qualitative research methodology and methods, was selected for this research study (Guba & Lincoln 1994; Saunders et al. 2009). Qualitative methodology was considered the most appropriate methodology for this research study as this methodology best aligns with the exploratory interpretative purposes of the research (Saunders et al. 2009).

Little is known about how executives at top performing firms in Australia achieve firm-wide strategic performance alignment so that their firm performs as required within strategic supply chains. An exploratory qualitative in-depth study within an interpretative research paradigm, is the most suitable research strategy to address the research problem by investigating a contemporary phenomenon in the 'real world' from the perspective of industry experts (Saunders et al. 2009). The exploratory qualitative interpretative research strategy was chosen as it provides the opportunity to conduct an in-depth study into the complex phenomena that drive executives at highly competitive firms in Australia to succeed and achieve their firm's corporate strategy, from their perspective.

The research strategy included the use of open-ended in-depth questions (**Appendix A**) that were used in semi-structured in-depth interviews and in an open-text questionnaire to address a time imposition risk for the industry experts. Learning about this complex issue using semi-structured in-depth open-ended questions allowed the discovery of new insights (Saunders et al. 2009) and allowed research participants to describe the nature of the phenomenon at top performing B2B firms in Australia from their point of view and experience (Neuman 2003). Research interviews are considered to be one of the most important data collection methods for qualitative research (Qu & Dumay 2011, p. 238). The Principal Investigator maintained a non-biased approach to avoid 'corrupting' the interview process (Qu & Dumay 2011). To reduce interviewer

bias, all semi-structured in-depth interviews conducted by the Principal Investigator were recorded, transcribed and verified by the interviewee (Saunders et al. 2009). The data collection approach is further discussed in Section 3.6. and the data analysis approach is discussed in Section 3.7. The next section describes the approach used to select and recruit high-quality research participants for this in-depth study.

3.5. Selection of research participants

The previous section justified adopting an exploratory qualitative in-depth research strategy for this research study. This section describes the approach used to select and recruit high-quality research participants for this in-depth study including research participant selection criteria, research participant search, research participant recruitment, interview protocol pack and research participants.

3.5.1. Research participant selection criteria

Selecting research participants using 'predetermined criterion of importance' is a purposeful criterion sampling strategy (Patton 2002, p. 238). Purposeful sampling is widely used in exploratory qualitative research and criterion sampling, as a purposeful sampling strategy, is used to narrow the range of variation within the sample to increase research reliability and validity (Patton 2002). A goal of this research study was to identify and select information-rich research participants related to the phenomenon of interest, which required using a purposeful criterion sampling strategy to achieve this goal (Patton 2002). Using the purposeful criterion sampling strategy increased the dependability, credibility and transferability of this research study (Bisman & Highfield 2012; Given 2008; Guba & Lincoln 1994; Patton 2002; Saunders et al. 2009).

This exploratory qualitative research study sought the participation of industry experts with specific employment experience at top performing B2B firms in Australia to assist with addressing the research problem (Section 3.3.2). Purposeful criterion sampling (Patton 2002; Suri 2011) was used to select research participants who met the following selection criteria:

> Industry experts with senior management and/or middle management level experience in corporate strategy, strategic supply chain management, performance management and measurement systems, cross-functional relationship management

and/or inter-firm supply chain relationship management, at firms in Australia with the characteristics identified in **Table 3.3**:

Table 3.3: Characteristics of firms in Australia

Firm Size	Firms with annual revenue greater than A$50 million and at least 50 – 200 employees.
Nature of Business	Firms from any industry which have strategic business-to-business relationships with key business suppliers and/or key business customers.
Top Performing	Firms regarded as top performing or best-in-class due to their consistency in increasing profit, or increasing revenue, or optimising costs, or achieving other superior levels of performance.
Corporate strategy	Firms that have: • aligned their corporate strategy to the performance requirements of strategic supply chains and/or • aligned their strategic supply chain performance objectives with their corporate strategy and/or • rolled out their corporate strategy across the firm (typically via their performance system)
Firm-wide performance management and measurement system	Firms that have a firm-wide performance management and measurement system that: • uses metrics that are aligned across the firm and are aligned to the corporate strategy and/or • is enabled by innovative performance management technology

3.5.2. Research participant search

The Principal Investigator used purposeful criterion sampling to identify suitable industry experts to invite to participate in the research study by examining her 6000 LinkedIn connections which included her industry connections (Patton 2002; Suri 2011). Searching for participants for this research study was very labour intensive and time-consuming for the Principal Investigator. The Principal Investigator painstakingly reviewed the LinkedIn profiles of several thousand connections plus industry experts not yet connected with, to identify suitable industry experts to invite to participate in the research. The Principal Investigator targeted industry experts with the following senior management and middle management position titles (in addition to many other similar titles): Chief Executive Officer, Chief Operating Officer, Chief Financial Officer, Chief Operations Officer, General Manager, General Manager Operations, General Manager Supply Chain, Supply Chain Director, Head of Supply Chain, Head of Procurement, Enterprise Performance Manager, National Supply Chain Manager, National Operations Manager, National Sales Manager, National Business Manager, Commercial Manager, Supply Chain Manager, Operations Manager, Business Development Manager and Category Manager. Selecting industry

experts to invite to participate in the research was based on their extensive relevant-to-research experience at top performing B2B firms (Section 3.5.1). Top performing B2B firms were identified by accessing IBISWorld (2019) company data and reports or information from the firms' websites or confirmation from research participants.

3.5.3. Research participant recruitment

The human research ethics process of USQ (University of Southern Queensland 2019) was adhered to during this research study. The research study was approved by the USQ Human Research Ethics Committee (**Appendix B**), and the ethics application was assessed as low risk (**Appendix C**). The research participant recruitment process was also very labour intensive and time-consuming for the Principal Investigator. From the thousands of LinkedIn profiles reviewed about potential industry experts to invite, and the review of information about associated firms, a shortlist of 1101 industry experts was developed. Using the invitation in **Appendix D**, email and LinkedIn messaging were used to individually invite the 1101 industry experts to participate in the research study, and an interview protocol pack was provided (Section 3.5.4). Once a positive reply was received, a further email was sent to request and confirm participation preferences.

3.5.4. Interview protocol pack

The interview protocol pack consisted of the Participant Information document, Consent Form, and the open-ended in-depth interview questions (**Appendices A** and **E** to **H**). The Participant Information played a vital role in identifying the purpose of the research study and included information about the research and the research participant selection criteria which allowed the participant to self-select by identifying whether they met the selection criteria. The Participant Information document assured privacy and confidentiality (Qu & Dumay 2011), it explained that participation was entirely voluntary and could be withdrawn at any stage, and explained the expected benefits and risks of participation.

The reliability and validity of the interview protocol pack were integral to this research study (Saunders et al. 2009). Before participant recruitment, the interview protocol pack was approved by the USQ Human Research Ethics Committee and was reviewed by two academic supervisors and two industry experts and validated as suitable. The

two industry experts who reviewed the interview protocol pack have a combined total of 78 years of strategic senior management experience, mostly at many top performing B2B firms, in addition to strategic supply chain management expertise and academic qualifications.

3.5.5. Research participants

The extensive research participant search, recruitment and selection process achieved the support of 30 participants. At first, 47 industry experts agreed to participate in the research, though 14 subsequently withdrew for various reasons and three did not meet selection criteria. The research study assured research participants that no personal details would be collected because the research is concerned with their point of view regarding work-related processes. Therefore, to protect anonymity of research participants and the firms referred to by research participants, and for confidentiality reasons, no identifiable data is provided. **Table 3.4** provides a summary of the characteristics of the research participants.

Table 3.4: Summary of characteristics of research participants

<table>
<tr><td>Number</td><td colspan="3">30 participants</td></tr>
<tr><td>Job Level</td><td colspan="3">Job levels used to describe participants in Table 3.7:
11 x Senior Management (37%)
16 x Middle+ Management (53%) - positions with extensive scope
3 x Middle Management (10%)</td></tr>
<tr><td>Position Types</td><td colspan="3">• Chief Executive Officers
• Executive Directors
• Executive General Managers
• Group General Managers
• General Managers of divisions
• Heads of divisions
• Global Managers
• National Managers
• State Managers
other management positions</td></tr>
<tr><td rowspan="5">Job Roles</td><td>4</td><td>Company Management
General Management</td><td>Company</td></tr>
<tr><td>13</td><td>Strategic Supply Chain Management
Supply Chain Management
Supply Chain Relationship Management</td><td>Supply Chain</td></tr>
<tr><td>6</td><td>Transformation Management
Operations Management
Human Resources Management</td><td>Operations</td></tr>
<tr><td>4</td><td>Strategic Procurement
Category Management
Contracts Management</td><td>Procurement</td></tr>
<tr><td>3</td><td>Financial Management</td><td>Financial</td></tr>
</table>

Job Role Scope	**Generic job role/scope used to describe participants in Table 3.7:** • 4 x Company (13%) • 13 x Supply Chain (44%) • 6 x Operations (20%) • 4 x Procurement (13%) • 3 x Financial (10%)
Location	• 10 x Brisbane (33%) • 7 x Melbourne (23%) • 7 x Sydney (23%) • 6 x Other (21%) including Adelaide, Newcastle, Sarina, Cairns and Townsville

This interpretative research study was not limited to specific industry sectors, because the aim of the study was not to explore the research problem (Section 3.3.2) with research participants employed in specific industry sectors. Using the interpretivism research paradigm, this research study seeks to explore the perceptions, opinions, and perspectives of the research participants about their experience as relevant to the research issues and research problem. Therefore, for the purpose of this research study, research participants, regardless of industry sector, were targeted for data collection, subject to research participant selection criteria in Section 3.5.1.

To provide context for the research study, **Table 3.5** provides the characteristics of the top performing B2B firms referred to by participants. The types of firms referred to the most by research participants were product-based (90%), large size (90%) and close to half of the firms (40%) were from the Industrials industry sector.

Table 3.5: Characteristics of the B2B firms referred to by participants

Nature of business of B2B firms / Business Type	90% of the firms referred to by participants, either supplied, manufactured, distributed, or transported products: • 8 x Product manufacturing (27%) • 7 x Product distribution (23%) • 6 x Product supply (20%) • 6 x Product transportation (20%) • 3 x Industrial services (10%)
Firm size	• **Large:** 90% (27) of the firms referred to by participants were large size firms with more than 200 employees. • **Medium:** 10% (3) of the firms referred to by participants were medium size firms with between 50 – 200 employees.

Industry sectors of B2B firms	• 40% (12) of the firms referred to by participants were from the Industrials industry sector.
	• The remaining firms referred to by participants were from the following industry sectors:
	  ○ 4 x Consumer Discretionary (13%)
	  ○ 4 x Health Care (13%)
	  ○ 4 x Materials (14%)
	  ○ 3 x Consumer Staples (10%)
	  ○ 2 x Utilities (7%)
	  ○ 1 x Energy (3%)

This research study used the Australian Stock Exchange (ASX) Sector Indices (ASX 2019) to identify the industry sectors of the B2B firms referred to by the research participants. Before, during and after data collection, the seven industry sectors identified in **Table 3.5**, demonstrated strong financial performance as measured by the Australian Stock Exchange and illustrated in **Table 3.6**.

Table 3.6: S&P/ASX 200 industry sector performance as at 16 March 2019

Industry Sector	**Year to Date Returns** *31/12/19 – 15/03/19*	**1 Year** *16/03/18 – 15/03/19*	**3 Year** *16/03/16 – 15/03/19*
Consumer Discretionary	9.70 %▲	1.14 %▲	6.38 %▲
Consumer Staples	3.85 %▲	5.05 %▲	8.19 %▲
Energy	16.88 %▲	14.69 %▲	13.99 %▲
Health Care	5.97 %▲	12.15 %▲	16.55 %▲
Industrials	10.21 %▲	9.29 %▲	7.52 %▲
Materials	12.39 %▲	12.73 %▲	20.24 %▲
Utilities	9.90 %▲	7.60 %▲	6.07 %▲

(Source: ASX 2019)

Using the purposeful criterion sampling strategy enabled the participation of industry experts with extensive experience relevant to the research problem which made them information-rich participants (Patton 2002). **Table 3.7** provides the job/firm characteristics of the research participants and participant coding. To protect anonymity, the individual research participants are referred to by the codes P1 to P30 as displayed in **Table 3.7.**

Table 3.7: Job/firm characteristics of research participants and participant coding

Code	**Job Level**	**Job Role Scope**	**Firm Size**	**Nature of Business**	**Industry Sector**
P1	Senior Management	Company	Large	Product transportation	Industrials
P2	Senior Management	Company	Large	Industrial services	Industrials
P3	Senior Management	Company	Medium	Product distribution	Health Care
P4	Senior Management	Company	Medium	Product manufacturing	Industrials
P5	Senior Management	Procurement	Large	Product distribution	Utilities
P6	Senior Management	Procurement	Large	Product transportation	Industrials
P7	Senior Management	Financial	Large	Product manufacturing	Industrials
P8	Senior Management	Financial	Large	Product supply	Health Care
P9	Senior Management	Operations	Large	Product supply	Energy
P10	Senior Management	Operations	Large	Product transportation	Industrials
P11	Senior Management	Operations	Large	Product manufacturing	Consumer Discretionary
P12	Middle+ Management	Supply Chain	Large	Product supply	Consumer Staples
P13	Middle+ Management	Supply Chain	Large	Product supply	Consumer Discretionary
P14	Middle+ Management	Supply Chain	Large	Product transportation	Industrials

Code	Job Level	Job Role Scope	Firm Size	Nature of Business	Industry Sector
P15	Middle+ Management	Supply Chain	Large	Product manufacturing	Materials
P16	Middle+ Management	Supply Chain	Large	Product distribution	Materials
P17	Middle+ Management	Supply Chain	Large	Product manufacturing	Health Care
P18	Middle+ Management	Supply Chain	Large	Product distribution	Consumer Staples
P19	Middle+ Management	Supply Chain	Large	Industrial services	Industrials
P20	Middle+ Management	Supply Chain	Large	Product manufacturing	Health Care
P21	Middle+ Management	Supply Chain	Large	Product transportation	Consumer Staples
P22	Middle+ Management	Supply Chain	Large	Product supply	Consumer Discretionary
P23	Middle+ Management	Supply Chain	Medium	Product distribution	Industrials
P24	Middle+ Management	Procurement	Large	Product manufacturing	Materials
P25	Middle+ Management	Procurement	Large	Product distribution	Materials
P26	Middle+ Management	Financial	Large	Product manufacturing	Industrials
P27	Middle+ Management	Operations	Large	Product transportation	Industrials
P28	Middle Management	Supply Chain	Large	Product supply	Consumer Discretionary
P29	Middle Management	Operations	Large	Product distribution	Utilities
P30	Middle Management	Operations	Large	Industrial services	Industrials

3.6. Qualitative data collection

The previous section described the approach used to select and recruit high-quality research participants. This section describes the approach used to collect data for this exploratory qualitative in-depth interpretive research study. The personalisation of the extensive research participant recruitment process allowed the Principal Investigator to feel a greater connection to each research participant who participated in the study, which led to the collection of an abundance of information-rich and context-specific data (Bisman & Highfield 2012). The extensive research participant recruitment process attracted the support of 30 participants from four capital cities (Brisbane, Melbourne, Sydney, and Adelaide) and four regional centres (Newcastle, Sarina, Cairns and Townsville) across Australia. Informed consent was obtained from all research participants prior to participating in the research study. To minimise research costs for the Principal Investigator (who was based in a small city in Central Queensland) and to mitigate time imposition risk for the industry experts, research participants were given the option to respond to the open-ended in-depth questions by interview by phone or Skype and or by open-text questionnaire with the Principal Investigator available to participants during completion. Eleven research participants participated in semi-structured in-depth interviews by phone and 19 participants responded to the open-ended in-depth questions by open-text questionnaire (using the USQ survey online tool or by using a Word document supplied by the Principal

Investigator). Several participants advised that it was their preference to spend adequate time thinking about the questions first and then providing a comprehensive written response via the open-text questionnaire. The open-ended in-depth questions allowed research participants to 'use their own language and express their own views' which allowed the research to collect in-depth insights (Rowley 2014, p. 314). As the collection of high-quality data and information-rich insights were paramount to this research not all questions were asked to or answered by each participant with participants focusing on their areas of expertise and experience at their employer's top performing B2B firm in Australia. Due to the open-ended nature of the in-depth questions, participants participated in the data collection methods on average for 30-80 minutes which resulted in the collection of over 200 pages of data.

Participant Information in the interview protocol pack played a vital role in reiterating the purpose of the research study and the research problem. The data collected from semi-structured in-depth phone interviews were recorded and written consent to record the interviews was provided by research participants. At the beginning of each semi-structured in-depth interview, the Principal Investigator confirmed the research purpose and offered a further explanation if required. All participants confirmed that they understood the research with the information provided and no additional explanation was required. The pre-question time allowed the Principal Investigator to establish rapport before asking the questions. The open-ended questions provided the opportunity for research participants to respond by elaborating on things they saw as important to the question (Qu & Dumay 2011, p. 251) and probing questions were used to gain additional insight (Saunders et al. 2009). To reduce interviewer bias and maximise data capture, all interviews were recorded and transcribed by an approved USQ confidential and secure transcription service, with the written transcription verified by the participant (Bisman & Highfield 2012; Saunders et al. 2009). Providing accurate data for transcription strengthened the research design and the data collection. The interview recordings were destroyed following data analysis.

The data collection techniques most often used for interpretivism research involves a small number of research participants in qualitative in-depth investigations (Saunders et al. 2009). Many researchers have differing opinions about how many interviews are required, or how many research participants should participate, in a qualitative

research study. Guest et al. (2006) found that high level themes can be discovered from six interviews and saturation can occur with 12 interviews. Douglas (1985) argues that at least 25 research participants are necessary to reach saturation, while Bertaux (cited in Guest et al. 2006, p. 61) believes that qualitative research should have a sample size of no less than 15. Patton (2002) and Saunders et al. (2009) explain that there are no rules regarding the number of research participants to involve in qualitative inquiry. Determining the number of research participants to involve in qualitative interpretive research is dependent on the research problem being addressed and what can be done with the available resources (Patton 2002; Saunders et al. 2009). The Principal Investigator went to exhaustive efforts to find available industry experts that met the research participant selection criteria (Section 3.5.1) using purposeful criterion sampling (Patton 2002; Suri 2011). The number of research participants involved in a qualitative study is deemed to be appropriate when data saturation is reached and the research problem can be addressed (Lincoln & Guba 1985; Saunders et al. 2009; Suri 2011). Suri (2018) argues that when the data collection is purposeful, the likelihood of reaching data saturation is higher. This research study used purposeful criterion sampling (Patton 2002; Suri 2011) to select and recruit industry experts to participate in this research which increased the likelihood of reaching data saturation. Data saturation is reached when further data collection provides no new or few insights (Saunders et al. 2009; Suri 2011). It was determined that enough data had been collected to address the research problem after the participation of 30 purposefully selected expert participants, with 11 participating in semi-structured in-depth interviews and 19 participating by responding to the open-ended in-depth questions by open-text questionnaire. Characteristics of the research participants are provided in Section 3.5.5. Research participants.

A research database was strictly maintained to record dates (invitation date, follow-up dates, interview date), data collection methods, consent acknowledgement, participant details, firm details and participant coding to anonymise data collected (Saunders et al. 2009). The research database stored the interview protocol pack, signed consent forms and data collected. The research database formed the basis of the data analysis.

3.7. Qualitative data analysis

The previous section justified the qualitative data collection approach used for this exploratory in-depth interpretive research study. This section describes the approach used to analyse the qualitative data. Qualitative data analysis is the detailed process of analysing and interpreting the meaning of the qualitative data collected during the research (Sullivan 2009). The data analysis method was designed to ensure that the perceptions of the research participants were analysed accurately from the research participant's view of their 'lived experience' in business world and not the Principal Investigator's perspective (Schwartz-Shea & Yanow 2012). As an interpretivist researcher, the Principal Investigator sought to explore and understand the perceptions and thoughts as described in the data by the research participants, for the purpose of identifying and analysing patterns in the data. Inductively based analytical procedures were used to analyse the qualitative data to satisfy the exploratory nature of this research study (Saunders et al. 2009). The process of data analysis for this research study included data reduction, data display, conclusion drawing and verification as recommended by Miles and Huberman (1994). Miles and Huberman (1994) report that the data analysis process can occur before, during and after data collection. In this research study, data analysis commenced after the first data was collected and continued in parallel with data collection process. As depicted in **Figure 3.2**, Miles and Huberman (1994, p. 10) explain that the data analysis process can occur before, during and after data collection.

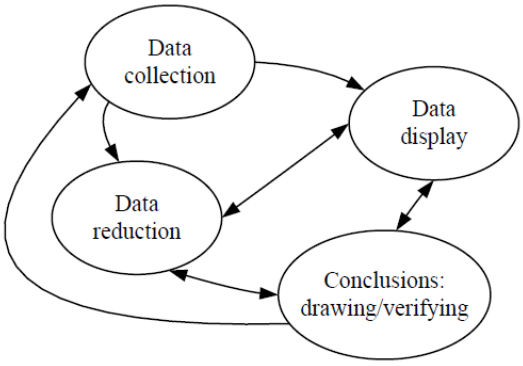

Figure 3.2: Components of data analysis: flow model
(Source: Miles & Huberman 1994, p. 10)

Anticipatory data reduction occurs before data collection when developing the theoretical framework and research issues, and when making purposeful sampling

decisions and while developing data collection instruments (Miles & Huberman 1994). The interim data reduction stage occurs during and after data collection, allowing the Principal Investigator to generate strategies to collect new data (Miles & Huberman 1994). The Principal Investigator continuously decided whether more data was needed (Sullivan 2009, p. 2). Strategies to collect more data were generated by the Principal Investigator during data collection by identifying whether the research required more data.

During the first read of the qualitative data collected it was important to focus on what the research participants were really saying and experiencing, without taking notes, as recommended by Corbin and Strauss (2008). Interpretivism research requires making sense of the data collected from research participants (Darby et al. 2019; Maxwell 2005). To make sense of the data, the Principal Investigator read through the qualitative data many times which led to an increased understanding of the phenomenon being studied (Sullivan 2009). Once familiar with the data, qualitative data analysis was conducted per research issue through thematic analysis, with the aid of NVivo (Beekhuyzen et al. 2010; Rowley 2014). NVivo is an appropriate qualitative analysis software package for qualitative data generated from open-ended questions (Beekhuyzen et al. 2010; Rowley 2014). The data collected per research participant was imported into NVivo to organise and code the data for this exploratory research. A data-driven thematic analysis approach was used to generate initial codes from the data to produce a rich description of the overall data (Nowell et al. 2017). The Principal Investigator kept the research issues visible during data analysis to ensure that the process of generating codes was focused on the phenomenon under study. Through an extensive data analysis and thematic coding process including identifying patterns and combining similar codes, initial themes were generated relating to each research issue. From this point, broader patterns were identified by examining relationships between the codes and the initial themes, and further combining of codes within the themes was conducted. The initial themes were reviewed against the research issues to ensure that the themes continued to focus on the phenomenon under study. Key themes started to emerge from the data. For example, a pattern emerged in the data in relation to repeated mentions about strategic supply chain requirements and the involvement of key supply chain-focused personnel during corporate strategy formulation. This data contributed

to defining and naming key *Theme 1: Strategic management-supply chain strategic alignment.*

A total of 11 key themes are presented, that either emerged from the data or were established from the questions, during the NVivo-assisted qualitative data analysis, as relevant to the research issues. Four key themes represent the data analysis of *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus* and are presented in Section 4.2.1 as follows:

- Section 4.2.1.1 presents *Theme 1: Strategic management-supply chain strategic alignment*
- Section 4.2.1.2 presents *Theme 2: Developing strategic supply chain strategies*
- Section 4.2.1.3 presents *Theme 3: Strategic supply chain configuration decision-making and planning*
- Section 4.2.1.4 presents *Theme 4: Strategic supply chain performance objectives*

Seven key themes represent the data analysis of *Research Issue 2: Corporate Strategy Cascading – to perform as required* and are presented in Section 4.2.2 as follows:

- Section 4.2.2.1 presents *Theme 5: Corporate strategy rollout*
- Section 4.2.2.2 presents *Theme 6: Strategic performance alignment*
- Section 4.2.2.3 presents *Theme 7: Strategic performance management system technology*
- Section 4.2.2.4 presents *Theme 8: Cross-functional relationships and alignment*
- Section 4.2.2.5 presents *Theme 9: People performance strategic alignment*
- Section 4.2.2.6 presents *Theme 10: Addressing behavioural issues*
- Section 4.2.2.7 presents *Theme 11: Strategic supply chain relationships and alignment*

Four key themes emerged from the data including Themes 1, 2, 3 and 9. Seven key themes were established from the questions including Themes 4, 5, 6, 7, 8, 10 and 11.

Extended text is the most common form of data display for qualitative data analysis (Miles & Huberman 1994). Therefore to enhance credibility of the data analysis, narrative text and quotations from the data collected were anonymised and used to produce 'situated accounts' of the phenomenon researched, and to add qualitative insights (Qu & Dumay 2011, p. 242; Shepherd & Suddaby 2016). Participant coding (Section 4.1.2) was applied to extended text in Chapter 4. Data display in Chapter 4 also included summarising findings into a table for each key theme along with the Principal Investigator's perception, gleaned from the data, of the dynamic capabilities and microfoundations of dynamic capabilities associated with each theme and research issue. The data displays enabled the analysis, comparison and interpretation of the data in Chapter 4, which allowed the Principal Investigator to draw meaning and conclusions for discussion in Chapter 5 (Saunders et al. 2009) including relationships between the key themes.

3.8. Quality and trustworthiness

The previous section justified the qualitative data analysis approach used for this exploratory in-depth interpretive research study. This section defends the quality and trustworthiness of the research methodology by addressing the dependability, credibility, and transferability of the research.

3.8.1. Dependability and reliability

Testing research for 'reliability', which measures replicability or repeatability, is used to judge quantitative research, where the research is assessed as reliable when similar findings can be reproduced using a similar methodology (Bisman & Highfield 2012; Saunders et al. 2009). As qualitative interpretive research is subject to multiple interpretations of reality, it may not possible to measure the same thing twice and therefore it may not be possible to reproduce similar findings by another interpretivist researcher (Bisman & Highfield 2012; Lincoln & Guba 1985). The quality and trustworthiness of qualitative interpretive research can be judged in terms of its dependability (Bisman & Highfield 2012; Guba & Lincoln 1994; Lincoln & Guba 1985). The consistent use of rigorous research techniques to collect and analyse high-quality data, strengthened the dependability of this research study (Guba & Lincoln 1994; Patton 2002; Saunders et al. 2009). This research study was supported by an interview protocol pack (**Appendices A** and **E** to **H**) which was approved by the USQ

Human Research Ethics Committee and was reviewed by two academic supervisors and two industry experts who validated the pack as suitable (Saunders et al. 2009). A purposeful criterion sampling strategy was applied (Patton 2002; Suri 2011) and the participant selection criteria stated in the interview protocol pack strengthened the dependability of the research as the research sought only to involve relevant and high-quality strategic-level research participants to ensure that the collection of relevant, high-quality data (Guba & Lincoln 1994; Patton 2002). Many invited industry experts provided feedback that they could not participate in the research as they did not meet the selection criteria, and other invitees sought clarification by phone or email before deciding whether to participate. While similar findings may not be possible, an interpretive researcher that is interested in repeating this research could use the interview protocol pack which provided the research study with a high degree of structure to strengthen the dependability of the research. The Principal Investigator also exercised critical judgement during interviews and at times sought clarification of interviewee responses to strengthen the dependability of the research (Qu & Dumay 2011, p. 252). This research study sought to minimise errors and bias by using the two stages of research design outlined in Section 3.3.3 (Saunders et al. 2009). A research database was maintained to track the data collection process and to store and secure data collection records and all data collected, thus enhancing methodological trustworthiness and dependability (Saunders et al. 2009). The Principal Investigator also took considerable care during data analysis to ensure that inferences and interpretation of the data by the Principal Investigator were a true reflection of the findings from the data to increase the dependability of the research (Bisman & Highfield 2012). The Principal Investigator achieved this by reading through the data many times to increase her understanding of the phenomenon being studied (Sullivan 2009). This exploratory qualitative interpretive in-depth research study achieved the goal of dependability.

3.8.2. Construct validity

Construct validity refers to the extent to which the operational measures developed for the research, measure the presence of the concepts being studied and intended to be measured (Saunders et al. 2009; Zikmund 2013). Testing construct validity is not relevant for this qualitative interpretive research study as construct validity is related

to quantitative research and is also used the test the validity of empirical case study research (Sarantakos 1998; Yin 1994).

3.8.3. Credibility and internal validity

The quality and trustworthiness of qualitative interpretive research can be judged in terms of its credibility (Bisman & Highfield 2012; Guba & Lincoln 1994; Lincoln & Guba 1985). To increase the credibility of the findings, the Principal Investigator ensured that she did not influence research participants before or during interviews by referring to and being guided by the interview protocol pack. Bisman and Highfield (2012, p. 16) explain that 'credibility requires the researcher to establish the truthfulness and believability of the findings from the participant's perspective'. To strengthen the dependability and credibility of this research study and reduce interviewer bias, all in-depth interviews were recorded to enhance the quality of the research, and transcribed by an approved USQ transcription service, with the written transcription verified by the participant (Bisman & Highfield 2012; Saunders et al. 2009). Verification of the written transcription was conducted soon after the interviews, which allowed research participants to request changes or amendments (Bisman & Highfield 2012). No research participant requested changes or amendments to written transcriptions, however the Principal Investigator used this opportunity on a few occasions to clarify one or two words that were inaudible, to which the research participants responded by confirming the words said. The checking of interview accuracy with research participants is also an assessment of internal validity. Internal validity was not entirely relevant for this research study as this research study did not seek to study causal relationships between dependent and independent variables, which is suitable for explanatory studies (Saunders et al. 2009). This exploratory qualitative interpretive in-depth research study achieved the goal of credibility.

3.8.4. Transferability and external validity

The quality and trustworthiness of qualitative interpretive research can be judged in terms of its transferability (Bisman & Highfield 2012; Guba & Lincoln 1994; Lincoln & Guba 1985). The transferability of qualitative research is achieved when the findings can be transferred to another situation or context (Given 2008). The Principal Investigator used several strategies to increase the transferability of this research study. Firstly, a purposeful criterion sampling strategy was applied (Patton 2002; Suri 2011)

by using research participant selection criteria (Section 3.5.1) to purposefully involve relevant and high-quality strategic-level research participants to closely link the participants to the context being studied (Given 2008; Guba & Lincoln 1994; Patton 2002). The research participant selection criteria also ensured that the research participants were relevant members of the business community related to the study (Given 2008). This close link allows other similar industry experts who may read this research to determine whether the findings can be transferred to their workplace (Given 2008). The Principal Investigator also felt a connection to the research participants which commenced from the personalisation of the extensive research participant recruitment process, where she identified that the participants were a perfect match to the context being studied and the business community related to the study - which increased the transferability of the research findings (Given 2008). Secondly, transferability can be increased by aligning the research problem and research issues with the context being studied to ensure that the research problem is appropriately addressed (Given 2008). The second strategy was achieved in this research study by using a two-stage research design (Section 3.3.3) and a validated interview protocol pack (Section 3.5.4) which included open-ended in-depth questions that were developed to appropriately address the research issues and research problem. The findings of this research study are not statistically generalisable, therefore external validity is not relevant to this qualitative research. This exploratory qualitative interpretive in-depth research study achieved the goal of transferability.

3.9. Research ethics process

The previous section defended the quality and trustworthiness of the research methodology by identifying how the goals of dependability, credibility and transferability were achieved. This section outlines the ethical considerations for the research.

Respect for human dignity and adherence to ethical research practices are integral principles of human research (Qu & Dumay 2011). The human research ethics process of the USQ (University of Southern Queensland 2019) was adhered to as follows during this research study:

a) The research study was approved by the USQ Human Research Ethics Committee (**Appendix B**), and the ethics application was assessed as low-risk (**Appendix C**)

b) Participants were provided with an interview protocol pack (**Appendices A** and **E** to **H**), allowing participants to make an informed decision to participate in the research

c) Participants provided consent to participate in the research and were not pressured into participating by the Principal Investigator (**Appendices F** and **H**)

d) Participants were assured of confidentiality both in the Participant Information documents (**Appendices E** and **G**) and before participating in the research

e) Confidentiality of the identity of information sources was maintained through a coded and secure database

f) Findings were reported accurately and in an unbiased manner

g) A report on the outcome of the research study was presented to the USQ Human Research Ethics Committee.

3.10. Summary

This chapter outlined the research design and methodology used to guide the research and presented the research problem and research issues. The selection of the interpretivism paradigm was justified, along with the adoption of an exploratory qualitative research purpose. An exploratory qualitative in-depth study within an interpretative research paradigm, was justified as the most suitable research strategy to address the research problem. The research methodology used to select and recruit research participants and to collect and analyse the data was outlined, and a discussion regarding the quality and trustworthiness of the methodology adopted was provided. The chapter concluded with an outline of the human research ethics process adhered to by this research study. Findings and analysis of findings from this research study are presented in the next chapter.

CHAPTER 4: FINDINGS

4.1. Introduction

The focus of this research study is to explore how executives at top performing B2B firms in Australia form and cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains. To help resolve the research problem through two research issues (Section 3.3.2), this research study seeks to explore the sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with corporate strategy formulation – *a strategic supply chain focus* and corporate strategy cascading – *to perform as required*.

Chapter 1 provided a background to the research and an overview of the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* relevant to this research study. Gaps in the literature were highlighted and the research problem was introduced. The relevance of the Dynamic Capabilities Theory to this research study was discussed and the research issues to be investigated by this research study were introduced. The scope of the research and delimitations were outlined, and an overview of the research methodology was provided. The structure of the thesis was outlined, and key terms and concepts were defined.

Chapter 2 presented a detailed review of the literature related to the two major domains *Strategic Performance Management* and *Supply Chain Performance Management*, and the Dynamic Capabilities Theory. *Strategic performance management* was defined, and its importance discussed; the links between strategic management, corporate strategy, and *strategic performance management* were explored; and corporate strategy cascading, strategy cascading approaches and the role of strategic performance management systems were explored and discussed. *Supply chain performance management* was defined, and its importance discussed; the links between strategic management, corporate strategy, supply chain and *supply chain performance management* were explored, as were the links with corporate strategy cascading. The Dynamic Capabilities Theory was defined and explored, as well as its relevance to the two major domains. The theoretical framework that underpins this research study was presented.

Chapter 3 provided a detailed account of the research design and methodology guiding and shaping the research. The selection of the interpretivism paradigm and the exploratory purpose of the research were justified, and the research problem and research issues were presented, and an outline of the stages of the research design was provided. The exploratory qualitative in-depth research strategy was justified, and an outline of the research methodology used to select and recruit research participants and to collect and analyse the data was provided. The quality and trustworthiness of the methodology was addressed, and an outline of ethical considerations was provided.

4.1.1. Objective of the chapter

The objective of this chapter is to present the findings and results of the qualitative data analysis of the data collected from research participants in response to the open-ended in-depth questions, and to present the analysis as relevant to the research issues. Section 4.1.2 presents the participant codes and Section 4.1.3 outlines the approach to data presentation. Section 4.2 presents the analysis of the research issues and Section 4.3 summarises the chapter. **Figure 4.1** depicts the fourth chapter and its three sections.

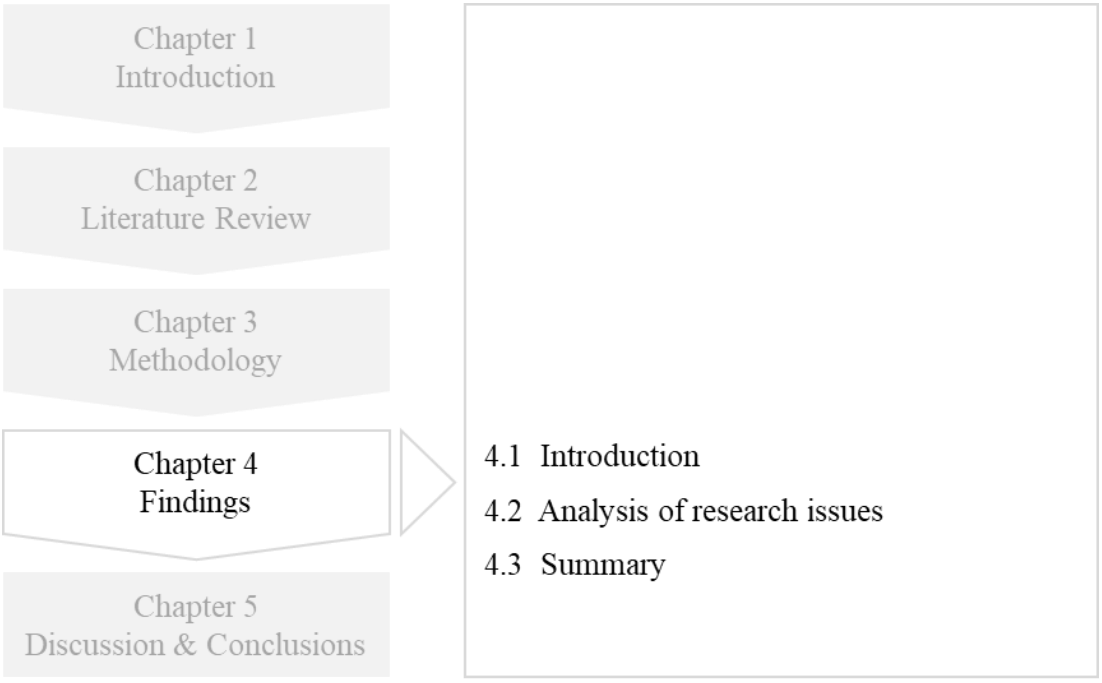

Figure 4.1: Outline of Chapter 4

4.1.2. Participant codes

This section presents the participant codes used to refer to individual research participants. **Table 4.1** provides a summary of the research participant characteristics and firm characteristics that were provided in Section 3.5.5 regarding job level, job role scope, firm size, nature of business and industry sector.

Table 4.1: Summary of research participant and firm characteristics

Job Level	**Job Role Scope**	**Firm Size**
11 x Senior Management (37%) 16 x Middle+ Management (53%) 3 x Middle Management (10%)	4 x Company (13%) 13 x Supply Chain (44%) 6 x Operations (20%) 4 x Procurement (13%) 3 x Financial (10%)	27 x Large (90%) 3 x Medium (10%)

Nature of Business / Business Type	**Industry Sector**
8 x Product manufacturing (27%) 7 x Product distribution (23%) 6 x Product supply (20%) 6 x Product transportation (20%) 3 x Industrial services (10%)	12 x Industrials (40%) 4 x Consumer Discretionary (13%) 4 x Health Care (13%) 4 x Materials (14%) 3 x Consumer Staples (10%) 2 x Utilities (7%) 1 x Energy (3%)

As mentioned in Section 3.5.5, this interpretative research study was not limited to specific industry sectors, because the aim of the study was not to explore the research problem (Section 3.3.2) with research participants employed in specific industry sectors. Using the interpretivism research paradigm, this research study seeks to explore the perceptions, opinions, and perspectives of the research participants about their experience as relevant to the research issues and research problem. Therefore, for the purpose of this research study, research participants, regardless of industry sector, were targeted for data collection, subject to research participant selection criteria in Section 3.5.1. The research study assured research participants that their anonymity and the firm's anonymity would be protected, therefore no identifiable data is provided. The individual research participants are referred to by the codes P1 to P30 as displayed in **Table 4.2**.

Table 4.2: Participant codes and characteristics

Code	**Job Level**	**Job Role Scope**	**Firm Size**	**Nature of Business**	**Industry Sector**
P1	Senior Management	Company	Large	Product transportation	Industrials
P2	Senior Management	Company	Large	Industrial services	Industrials
P3	Senior Management	Company	Medium	Product distribution	Health Care

Code	Job Level	Job Role Scope	Firm Size	Nature of Business	Industry Sector
P4	Senior Management	Company	Medium	Product manufacturing	Industrials
P5	Senior Management	Procurement	Large	Product distribution	Utilities
P6	Senior Management	Procurement	Large	Product transportation	Industrials
P7	Senior Management	Financial	Large	Product manufacturing	Industrials
P8	Senior Management	Financial	Large	Product supply	Health Care
P9	Senior Management	Operations	Large	Product supply	Energy
P10	Senior Management	Operations	Large	Product transportation	Industrials
P11	Senior Management	Operations	Large	Product manufacturing	Consumer Discretionary
P12	Middle+ Management	Supply Chain	Large	Product supply	Consumer Staples
P13	Middle+ Management	Supply Chain	Large	Product supply	Consumer Discretionary
P14	Middle+ Management	Supply Chain	Large	Product transportation	Industrials
P15	Middle+ Management	Supply Chain	Large	Product manufacturing	Materials
P16	Middle+ Management	Supply Chain	Large	Product distribution	Materials
P17	Middle+ Management	Supply Chain	Large	Product manufacturing	Health Care
P18	Middle+ Management	Supply Chain	Large	Product distribution	Consumer Staples
P19	Middle+ Management	Supply Chain	Large	Industrial services	Industrials
P20	Middle+ Management	Supply Chain	Large	Product manufacturing	Health Care
P21	Middle+ Management	Supply Chain	Large	Product transportation	Consumer Staples
P22	Middle+ Management	Supply Chain	Large	Product supply	Consumer Discretionary
P23	Middle+ Management	Supply Chain	Medium	Product distribution	Industrials
P24	Middle+ Management	Procurement	Large	Product manufacturing	Materials
P25	Middle+ Management	Procurement	Large	Product distribution	Materials
P26	Middle+ Management	Financial	Large	Product manufacturing	Industrials
P27	Middle+ Management	Operations	Large	Product transportation	Industrials
P28	Middle Management	Supply Chain	Large	Product supply	Consumer Discretionary
P29	Middle Management	Operations	Large	Product distribution	Utilities
P30	Middle Management	Operations	Large	Industrial services	Industrials

This section presented the participant codes used to refer to individual research participants. The next section outlines the approach to data presentation used in this chapter.

4.1.3. Approach to data presentation

The previous section presented the participant codes. This section outlines the approach to data presentation used in this chapter during the analysis of the research issues. The approach to presentation of the qualitative data in this chapter followed the first two steps recommended by Miles and Huberman (1994) including data reduction and data display, supplemented by data-driven thematic analysis with the aid of NVivo (Beekhuyzen et al. 2010; Nowell et al. 2017; Rowley 2014). The following approach was adopted for this chapter for data reduction and data display:

- Responses to open-ended in-depth questions were analysed in NVivo per research issue and key themes emerged from the data and were established from the questions. Responses relevant to each key theme were generalised by the Principal Investigator and response samples were provided in extended text format.
- The responses relevant to each key theme were then organised and compressed into a table that summarised the findings for each key theme per research issue. The table listed the Principal Investigator's perception, gleaned from the data, of the sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with each theme and research issue.

This section outlined the approach to data presentation used in this chapter during the analysis of the research issues. The next section presents the analysis of the research issues using key themes that either emerged from the data or were established from the questions, during the NVivo-assisted analysis.

4.2. Analysis of research issues

The previous section outlined the approach to data presentation used in this section. This section presents the analysis of the research issues using key themes that either emerged from the data or were established from the questions, during the NVivo-assisted analysis. The analysis and interpretation of the data obtained from the open-ended in-depth questions enabled the Principal Investigator to obtain a better understanding of the response to the research problem: *How do executives at top performing B2B firms in Australia form and cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains?*

A total of 11 key themes are presented from the NVivo-assisted qualitative data analysis as relevant to the two research issues. The following two sections present the findings of the qualitative data analysis as relevant to the two research issues, using the interpretivism research paradigm to explore the perceptions, opinions, and perspectives of the research participants.

4.2.1. *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus*

Research Issue 1: When executives at top performing B2B firms in Australia seek to ensure that the firm performs as required within its strategic supply chains, what sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy formulation?

Research Issue 1 sought to explore the perceptions, opinions, and perspectives of the research participants regarding the strategic supply chain considerations of B2B firms during corporate strategy formulation to ensure that the firm performs as required within its strategic supply chains; and sought to identify dynamic capabilities and microfoundations of dynamic capabilities associated with this process. Of the 30 participants, 20 participants provided perceptions and insights regarding strategic supply chain considerations by their B2B firms during corporate strategy formulation, including six at Senior Management job level (P1, P3, P4, P5, P8 and P11), 13 at Middle+ Management job level (P12, P13, P14, P15, P16, P17, P19, P20, P22, P23, P24, P25 and P27) and one at Middle Management job level (P30), which enabled good representation in the analysis. Remaining participants discussed alignment to corporate strategy which is addressed in Section 4.2.2 *Research Issue 2: Corporate Strategy Cascading – to perform as required*. For example, Middle+ Management participant P21 indicated that alignment between strategic management and supply chain at their firm occurs through alignment of their supply chain strategy to their overall business strategy, stating: “In the case of my current firm the supply chain strategy is aligned with the overall business strategy” (P21). Alternative perspectives were also provided by two Senior Management participants P2 and P7 who had very similar views, which are reflected in the response provided by participant P2. Senior Management participant P2 explained that supply chain is not considered in their firm’s corporate strategy and believed that it would be more relevant for a firm that specialises in supply chain as their primary business, stating: “I would say companies that do it well would specialise in supply chain as their primary business” (P2).

From the 20 participants who provided perceptions and insights regarding strategic supply chain considerations by their B2B firms during corporate strategy formulation, three key themes emerged from the data (Themes 1, 2 and 3) and Theme 4 was

established from the question pertaining to strategic supply chain performance objectives. The following four key themes represent the data analysis of *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus*:

- Section 4.2.1.1 presents *Theme 1: Strategic management-supply chain strategic alignment*
- Section 4.2.1.2 presents *Theme 2: Developing strategic supply chain strategies*
- Section 4.2.1.3 presents *Theme 3: Strategic supply chain configuration decision-making and planning*
- Section 4.2.1.4 presents *Theme 4: Strategic supply chain performance objectives*

4.2.1.1. *Theme 1: Strategic management-supply chain strategic alignment*

A key theme emerged from the data regarding the linkage and alignment between strategic management and supply chain (where 'supply chain' represents strategic supply chain requirements and supply chain personnel) during corporate strategy formulation to ensure that the B2B firm gains and sustains significant supply chain competitive advantages. The 20 participants identified above provided perceptions and insights that are presented in Themes 1 to 4 which illustrate linkage and alignment at their firms between strategic management and supply chain during corporate strategy formulation. However, 12 participants provided greater insights into how this linkage and alignment is established at their firms, including supply chain personnel being involved in corporate strategy planning workshops, off-site planning workshops and spending several months investigating supply chain opportunities to incorporate into corporate strategy. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 1: Strategic management-supply chain strategic alignment* is provided.

The 12 participants who provided greater insights regarding the linkage and alignment between strategic management and supply chain at their firms during corporate strategy formulation to gain and sustain competitive advantage, included three at Senior Management job level (P3, P8 and P11), eight at Middle+ Management job level (P12, P13, P16, P17, P22, P23, P25 and P27) and one at Middle Management job level (P30). These participants indicated that the strategic management-supply chain

strategic alignment allows the identification of supply chain opportunities to drive business growth, to gain insights into the firm's strategic supply chains and allows the firm to drive value.

Senior Management participant P11 explained that their 70-year-old firm requires a supply chain representative on the executive management team for their firm to incorporate strategic supply chain opportunities into the corporate strategy (P11). Participant P11 expressed that the global financial crisis during 2008 and 2009 was a pivotal time that "made the Board start to look at the business in a different way" by recognising that the supply chain "is a critical component of the business" (P11). The firm realised they needed "someone on the Board or at the executive level that understands the supply chain" and when that was implemented "we killed it" which required the executive "understanding the business capabilities" (P11). Participant P11 elaborated:

> You don't let the salesman dictate it, your sales director, you don't let your finance guy direct it, you've got to actually have an operational person that knows what they're talking about on, at the senior level to actually implement and initiate, or impact on the strategic side of it (P11).

Among five Middle+ Management participants (P12, P13, P16, P22 and P25) there was a similar view that senior management and supply chain personnel at their firms are involved in strategic planning workshops during the development of corporate strategy. Participant P22 explained that as part of the supply chain leadership team, he and the General Manager of Supply Chain spend three to four months being involved in the development of the corporate strategy to develop and align strategic business and supply chain objectives. Participant P13 explained that their firm's executive team spend a week offsite to undertake strategic planning involving members of the supply chain management team, to determine strategic supply chain objectives to meet the business needs:

> Every year around August [due to a January to December fiscal year] the Executive team spends a week offsite to undertake strategic planning for the following year. This involves presentations from the sales and marketing teams from which myself [Supply Chain] and my team determine the strategic objectives for supply chain to meet the business needs (P13).

Two Middle+ Management participants (P12 and P25) indicated that their firms' corporate strategy incorporates supply chain opportunities and strategies and their firms have ensured alignment between the corporate strategy and supply chain strategy. Participant P12 explained that after the involvement of supply chain personnel in corporate strategy workshops, that supply chain personnel develop and align the supply chain strategy with the corporate strategy:

> The corporate strategy was developed with putting the customer first and strategic imperatives. After this was developed with supply chain in the workshops, the supply chain strategy was then developed to ensure alignment between the corporate and supply chain strategy (P12).

Middle+ Management participant P25 indicated that their firm incorporate strategy pertaining to supply chain in their corporate strategy and that they align their supply chain strategy with their corporate objectives and involve a supply chain person while forming the corporate strategy:

> A lot of strategy in the corporate strategy around supply chain. […] it's quite important that the supply chain strategy align with the corporate objectives from the very beginning […] it requires a supply chain person from the beginning while they're forming the corporate strategy (P25).

Two Middle+ Management participants (P16 and P27) shared the view that their firms rely on the strategic supply chain insights and capabilities of managers. Participant P16 indicated that the involvement of supply chain personnel during corporate strategy formulation enabled strategic management to gain insights into the firm's strategic supply chains, to incorporate strategic supply chain opportunities to drive business growth. Participant P16 stated: "As strategic supply chain, includes integration with customers, collaboration with suppliers and engagement of the supply chain workforce it is vital for corporate strategy" (P16). Participant P16 explained that it is important to "have the supply chain leadership demonstrate how supply chain can drive customer growth and satisfaction, as well as supplier and innovation initiatives" (P16).

To incorporate strategic supply chain opportunities and decisions in corporate strategy, participant P27 explained that their firm relies on strategy managers with very good capability who are across the markets, supply chains and macroeconomic issues. Participant P27 referred to the strategy managers as experts who collect and analyse

this information in relation to each of the supply chain segments that their firm delivers transportation services for business customers:

> We've organised ourselves over the years, particularly in the last couple of years we've had some pretty significant change with strategy managers in a strategy organisation, really good capability of people, and I suppose we've been relying on those people to be able to be across markets and supply chains, and I guess macroeconomic issues more broadly, within the economy. So, that has started at a really high level and filtered down through the national economy then through to GDP issues, through to market issues, and then it will work, in our case, down to the various segments, whether it's [supply chain segment 1], or [supply chain segment 2], or [supply chain segment 3], or [supply chain segment 4], and so, trying to pull all that together, just by having some experts in the field that they're able to collect and analyse information (P27).

Middle Management participant P30 provided comprehensive detail about the process followed by their firm to involve specialist procurement advisors during corporate strategy formulation regarding spend solutions, as they monitor global trends, issues, and opportunities, to ensure that the firm gains a supply chain advantage (P30). Participant P30 also explained that their firm incorporates strategies to: "Build expertise across the procurement lifecycle in the business including supply chain, market intelligence, demand management, market engagement and contract and performance management" (P30).

Senior Management participant P3 explained that their firm's strategic sourcing strategy is incorporated into their corporate strategy as it is their "overall strategy to be a value-add distribution business in a technology space" by procuring revenue-generating products that they can on-sell as well as up-sell technical support for those products (P3).

Three Middle+ Management participants (P8, P17 and P23) discussed linkages between supply chain and corporate during corporate strategy formulation at their firms to drive value, achieve supply chain improvements and to help their business customers to achieve supply chain improvements. Senior Management participant P8 expressed that inclusion of strategic supply chain management in corporate strategy at their firm is new for the business but do so to drive value:

> So, in our business, strategic supply chain management is part of the corporate strategy only recently. […] They're bringing this to the table. They're saying, you will focus on that, because they know it'll drive value (P8).

A linkage between strategic management and supply chain during corporate strategy formulation is also established through the incorporation of projects, improvement programs and initiatives as explained by Middle+ Management participants P17 and P23. Participant P17 explained that their firm "incorporate into the corporate strategy specific supply chain projects and improvement programs" (P17). Similarly, participant P23 believed that strategic and operational supply chain initiatives are a key driver of their corporate strategy and that these initiatives "affect the successful existence of the business in the market" (P23):

> Being an importer and wholesale distributor, both strategic and operational supply chain initiatives are a key driver of our corporate strategy (P23).

Table 4.3 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 1: Strategic management-supply chain strategic alignment*, using representative supporting data from the findings. Sensing, seizing, and transforming capabilities were discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 1 is provided in Chapter 5.

Table 4.3: Summary of dynamic capabilities and microfoundations associated with *Theme 1: Strategic management-supply chain strategic alignment*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Sensing *sense and shape opportunities and threats*	Entrepreneurial (Teece 2009) Top management sensing importance of strategic supply chains Strategic supply chain sensing Customer orientation (Vijaya et al. 2019; Zhou & Li 2010)	Top management detecting the importance and value of the supply chain and of incorporating strategic supply chain considerations into corporate strategy	• the Board recognises that the supply chain is a critical component of the business (P11) • recognition that strategic supply chain management in the corporate strategy will drive value (P8)
		Detect how supply chain can drive customer growth and satisfaction, and supplier and innovation initiatives	• "have the supply chain leadership demonstrate how supply chain can drive customer growth and satisfaction, as well as supplier and innovation initiatives" (P16)
		Market monitoring • Market trends (Khan et al. 2020) Interpreting available information (Khan et al. 2020; Teece 2009)	• relies on strategy managers with very good capability who are across the markets, supply chains and macroeconomic issues – "to pull all that together, just by having some experts in the field that they're able to collect and analyse information" (P27) • monitor [procurement related] global trends, issues, and opportunities, to ensure that the firm gains a supply chain advantage (P30)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
		Identify how the firm will be impacted (Teece 2009)	• strategic and operational supply chain initiatives are a key driver of their corporate strategy and that these initiatives "affect the successful existence of the business in the market" (P23)
Seizing *seize opportunities*	Top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) Stakeholder management (Sodhi 2015) Corporate strategy formulation with a strategic supply chain focus Strategic supply chain decision-making	Building loyalty and commitment • Effectively communicating (Teece 2009) Seizing strategic supply chain opportunities while maintaining commitment of key supply chain-focused stakeholders	• 12 participants provided greater insights regarding the linkage and alignment between strategic management and supply chain during corporate strategy formulation to gain and sustain competitive advantage (P3, P8, P11, P12, P13, P16, P17, P22, P23, P25, P27, P30) • involve supply chain personnel in corporate strategy planning workshops (P12) • "strategic planning […] involves presentations from the sales and marketing teams from which myself [Supply Chain] and my team determine the strategic objectives for supply chain to meet the business needs" (P13). • "engagement of the supply chain workforce it is vital for corporate strategy" (P16) • supply chain leadership team members spend three to four months being involved in the development of the corporate strategy (P22)
		Strategic planning to seize strategic supply chain opportunities and determine supply chain strategic objectives	• incorporation of strategic supply chain opportunities into the corporate strategy (P11, P16, P27) • undertake strategic planning to determine supply chain strategic objectives to meet the business needs (P13) • incorporation of supply chain objectives and alignment (P22) • strategic sourcing strategy is incorporated into their corporate strategy as it is their "overall strategy to be a value-add distribution business in a technology space" (P3) • incorporation of spend solutions (P30) • "incorporate into the corporate strategy specific supply chain projects and improvement programs" (P17) • "strategic supply chain management is part of the corporate strategy […] because they know it'll drive value" (P8) • both strategic and operational supply chain initiatives are a key driver of our corporate strategy (P23)
Transforming *transform, reconfigure, and manage threats*	Strategic management-supply chain strategic alignment Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007)	Decentralised strategic decision-making to bring top management closer to strategic supply chain elements Combining strategic management and strategic supply chain skills and knowledge Supply chain knowledge transfer to top management	• through involvement of supply chain personnel during corporate strategy formulation enabled strategic management to gain insights into the firm's strategic supply chains (P16) • through involvement of strategy managers who are across the markets, supply chains and macroeconomic issues during corporate strategy formulation (P27) • through involvement of specialist procurement advisors with procurement related knowledge of global trends, issues, and opportunities during corporate strategy formulation (P30) • "have the supply chain leadership demonstrate how supply chain can […]" (P16) • required executive to understand supply chain and understand business capabilities (P11)
		Corporate strategy-pre-supply chain strategy alignment	• align the supply chain strategy with the corporate strategy (P12) • align strategic business and supply chain objectives (P22) • align supply chain strategy with corporate objectives (P25)

4.2.1.2. *Theme 2: Developing strategic supply chain strategies*

A key theme emerged from the data about developing strategic supply chain strategies as strategic supply chain opportunities to incorporate into corporate strategy to ensure that the firm gains and sustains significant supply chain competitive advantages. Thirteen participants provided perceptions and insights regarding the development of supply chain strategies at their firms during corporate strategy formulation to gain and sustain competitive advantage, including three at Senior Management job level (P3,

P4, and P11), nine at Middle+ Management job level (P12, P13, P14, P16, P17, P19, P20, P23 and P25) and one at Middle Management job level (P30). Customer-focused supply chain strategies and supplier-focused supply chain strategies were found in the data. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 2: Developing strategic supply chain strategies* is provided.

Nine participants (P3, P11, P12, P13, P14, P16, P17, P19 and P20) indicated that their firms develop and incorporate customer-focused supply chain strategies into their corporate strategy. Seven participants (P3, P11, P16, P19, P20, P25 and P30) indicated that their firms develop and incorporate supplier-focused supply chain strategies into their corporate strategy. Five of these nine participants indicated that their firms consider both customer-focused and supplier-focused supply chain strategies during corporate strategy formulation, including Senior Management participants P3 and P11, and Middle+ Management participants P16, P19 and P20.

Middle+ Management participant P12 indicated that their firm involves the supply chain team during corporate strategy formulation to develop strategies to put the customer first. Middle+ Management participant P14 also indicated that their firm incorporates customer-focused strategies that help their business customers to understand and gain the benefits of "strategic supply chain management to improve competitiveness and reduce costs" (P14) and named their firm's large business customers (firm names withheld from this thesis) that they serve and assist to improve strategic supply chain management:

> We work with a number of Australian companies discussing ways that strategic supply chain management improves competitiveness and reduces costs. We also do this for companies in Europe, North America, and Asia. In general, we find that the Australian businesses are behind in their understanding of the benefits of strategic supply chain management (P14).

Senior Management participant P11 and Middle+ Management participant P17 explained that their firms incorporate customer-focused strategies that are aimed at predicting the needs of the customer. Participant P17's firm incorporate customer-focused supply chain performance-based strategies as a competitive strategy to enter single source negotiated arrangements. Participant P17 provided another customer-

focused strategy example where their firm identifies the most influential employees in the customer's firm that can influence senior management about product choice since these employees occupy positions that generate the customer's revenue:

> [Employee Service Provider Position] still have influence over product use particularly in the domains of CFOs and CEOs – the [Employee Service Provider Position] bring in the cash (P17).

Senior Management participant P11's firm incorporate customer-focused strategies that include knowing what the customer wants and being able to dictate trends in the market and new products since their firm is a dominant player:

> we have a really good feel for what the customers want, and in the end, because we're a dominant player in the market, we're able to dictate, to an extent, the trends in the market, because we're the biggest player in […] and the biggest player in […]. We're able to dictate a little bit of new products, because we'll have the biggest product development process (P11).

Senior Management participant P3 and Middle+ Management participant P20's firms incorporate customer-focused strategies to ensure that the right inventory is in the market for business growth:

> So, for our company […] it's very important that we identify the right products for our market, and that's where a lot of our IP [intellectual property] is. So, our strategy, we sit down and look at things like what margins we want to accept, what type of value-add is available on those types of product lines, and where we fit. […] sourcing the right products that fit their particular needs [the customer], so that's part of our strategy. That's a big one (P3).

> it's about having the right inventory present in the market so that the supply chain strategy in terms of the overall business is *how do we grow?* (P20).

The customer-focus philosophy at Senior Management participant P3's firm is to treat the suppliers they represent in the Australasian market as their customers:

> So, they're both customers in our view. One, we represent in the Australasian market, that's our suppliers. And one, we sell to, which is our end-user (P3).

Middle+ Management participant P16's firm includes supplier-focused strategies regarding supplier collaboration and driving supplier and innovation initiatives, and

customer-focused strategies to drive customer growth and satisfaction. Senior Management participant P11's firm includes supplier-focused strategies which also focus on establishing partnerships and relationships with suppliers:

> We also looked at […] where do specific partnerships and relationships [exist with suppliers], what are required. So, for us, if we're going to go offshore, we always have a minimum of two suppliers, we don't lock ourselves into one supplier only. So, if they go bust, they're taken over and things change, you've always got an alternative. So, we pretty much had a dual-pronged attack, whereas what I purchased off you, I purchased off your neighbour as well, just to keep everybody honest. And then we built all that into the corporate plan, basically; made sure someone was accountable for it (P11).

Senior Management participant P11 emphasised the importance of building better supplier relationships and establishing supplier agreements that include specific terms regarding quality, delivery, and technology. Senior Management participant P11 also stressed that very good relationships are required with sole source suppliers:

> […] somebody's supplying a material that they are the only people in the world, we have a very good relationship with (P11).

Senior Management participant P3's firm incorporate supplier-focused strategies that focus on working with suppliers that are listed in the top 20 largest companies on the Australian Securities Exchange (ASX) and have very strong performance indicators:

> Our contracts are with our big suppliers here – so, we do business with companies who are well and truly into the ASX top twenty, and they have very strong performance indicators (P3).

Supplier-focused strategies for participant P3's firm also includes making decisions about supplier products to invest in after being educated about the product by the supplier:

> we also use a lot of video conferencing to get the education around the products, before we actually make those decisions to proceed, so we can get our investment hats on, and understand where the value for that product line is going to be (P3).

Participant P3's firms' supplier-focused strategies directly contribute to achieving their customer-focused strategies to ensure that their customers get what they need:

> managing that supply chain [suppliers], because if we don't do it, the end user or customer doesn't get what they need (P3).

Middle+ Management participant P25 explained that the supply chain strategies incorporated into their firm's corporate strategy pertains to key stakeholders in the supply chain. They incorporate supplier-focused strategies including category management strategies to manage "all the top spending items" using team managers who "are category managers or specialists and are specialist subject matter experts in those areas" (P25). Similarly, Middle Management participant P30's firm also incorporates similar supplier-focused strategies regarding strategic spend. Participant P25 explained that their firm also incorporates the needs of other supply chain stakeholders including the local city council and landowners regarding the development of appropriate labour strategies to ensure compliance:

> We're talking about – on the corporate development side of things – how you're engaging your labour with the landowners in the areas. How you're making sure your strategies are aligned with the council requirements or making sure all the compliance and government requirements [are met]. And from doing so, they're also managing the suppliers or the contractor management a lot better (P25).

Seven participants' firms incorporate technology-related decisions and supply chain strategies during corporate strategy formulation, including two Senior Management participants P3 and P4 and five Middle+ Management participants P13, P19, P20, P23 and P25. Technology-related decisions are addressed in Section 4.2.1.3 *Theme 3: Strategic supply chain configuration decision-making and planning*.

Table 4.4 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 2: Developing strategic supply chain strategies*, using representative supporting data from the findings. Sensing, seizing, and transforming capabilities were discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 2 and the additional insights is provided in Chapter 5.

Table 4.4: Summary of dynamic capabilities and microfoundations associated with *Theme 2: Developing strategic supply chain strategies*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Sensing *sense and shape opportunities and threats*	Entrepreneurial (Teece 2009) Strategic supply chain sensing Customer orientation (Vijaya et al. 2019; Zhou & Li 2010) Product portfolio management (Eggers 2012; Vijaya et al. 2019) Sensing threats (Teece 2009) Supplier orientation	Market monitoring • Market trends • Customer needs (Khan et al. 2020) Sensing opportunities for new products (Khan et al. 2020; Teece 2009) Predictive capability (Danneels 2008; Oliver & Holzinger 2008; Vijaya et al. 2019) Shaping opportunities and shaping markets (Teece 2009)	• "it's very important that we identify the right products for our market, and that's where a lot of our IP is. So, our strategy, we sit down and look at things like […] sourcing the right products that fit their particular needs [the customer]" (P3). • "we find that the Australian businesses are behind in their understanding of the benefits of strategic supply chain management" (P14) • "it's about having the right inventory present in the market so that the supply chain strategy in terms of the overall business is *how do we grow?*" (P20) • "we have a really good feel for what the customers want, and in the end, because we're a dominant player in the market, we're able to dictate, to an extent, the trends in the market, because we're the biggest player in […] and the biggest player in […]. We're able to dictate a little bit of new products, because we'll have the biggest product development process" (P11)
		Sensing strategic supply chain threats to competitive advantages	• "managing that supply chain [suppliers], because if we don't do it, the end user or customer doesn't get what they need" (P3) • "offshore, we always have a minimum of two suppliers, we don't lock ourselves into one supplier only. So, if they go bust, they're taken over and things change, you've always got an alternative. So, we pretty much had a dual-pronged attack, whereas what I purchased off you, I purchased off your neighbour as well, just to keep everybody honest" (P11)
		Learning (Khan et al. 2020; Teece 2009) Processes to tap supplier innovation (Teece 2009) Interpreting available information (Khan et al. 2020; Teece 2009)	• "we also use a lot of video conferencing [with suppliers] to get the education around the products, before we actually make those decisions to proceed, so we can get our investment hats on, and understand where the value for that product line is going to be" (P3)
Seizing *seize opportunities*	Top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) Stakeholder management (Sodhi 2015) Strategic supply chain strategies development for corporate strategy Strategic supply chain decision-making Inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019)	Building loyalty and commitment • Effectively communicating (Teece 2009) Seizing strategic supply chain opportunities while maintaining commitment of key supply chain-focused stakeholders	• involves the supply chain team during corporate strategy formulation to develop strategies to put the customer first (P12) • incorporate supplier-focused strategies […] using "category managers or specialists and are specialist subject matter experts in those areas" (P25)
		Developing customer-focused supply chain strategies to seize competitive opportunities Developing supplier-focused supply chain strategies to seize competitive opportunities	• 13 participants provided insights regarding the development of supply chain strategies during corporate strategy formulation to gain and sustain competitive advantage (P3, P4, P11, P12, P13, P14, P16, P17, P19, P20, P23, P25, P30). Customer-focused supply chain strategies and supplier-focused supply chain strategies were found in the data. • "So, our strategy, we sit down and look at things like what margins we want to accept, what type of value-add is available on those types of product lines, and where we fit" (P3) • incorporate customer-focused strategies to ensure that the right inventory is in the market for business growth (P3, P20)
		Strategic planning • Finding strategic partners (Khan et al. 2020)	• "Our contracts are with our big suppliers here – so, we do business with companies who are well and truly into the ASX top twenty, and they have very strong performance indicators" (P3) • importance of building better supplier relationships and establishing supplier agreements that include specific terms regarding quality, delivery, and technology (P11)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
			• competitive strategy to enter single source negotiated arrangements (P17)
		Selecting decision-making protocols • Avoiding decision errors (Teece 2009)	• "offshore, we always have a minimum of two suppliers, we don't lock ourselves into one supplier only" (P11)
		Collaboration (Khan et al. 2020)	• help business customers to gain the benefits of "strategic supply chain management to improve competitiveness and reduce costs" (P14) • "somebody's [supplier] supplying a material that they are the only people in the world, we have a very good relationship with" (P11) • "on the corporate development side of things – how you're engaging your labour with the landowners in the areas. How you're making sure your strategies are aligned with the council requirements or making sure all the compliance and government requirements [are met]" (P25)
Transforming *transform, reconfigure, and manage threats*	Strategic management-supply chain strategic alignment	Decentralised strategic decision-making to bring top management closer to strategic supply chain elements Combining strategic management and strategic supply chain skills and knowledge Supply chain knowledge transfer to top management	• incorporate supplier-focused strategies including category management strategies to manage "all the top spending items" using team managers who "are category managers or specialists and are specialist subject matter experts in those areas" (P25)

4.2.1.3. *Theme 3: Strategic supply chain configuration decision-making and planning*

A key theme emerged from the data in relation to strategic supply chain configuration decisions and plans, identified as strategic supply chain opportunities to incorporate into corporate strategy to ensure that the firm gains and sustains significant supply chain competitive advantages and achieves superior supply chain performance. Sixteen participants provided perceptions and insights regarding the incorporation of strategic supply chain configuration-related decisions in corporate strategy at their firms, including five at Senior Management job level (P1, P3, P4, P5 and P11), ten at Middle+ Management job level (P12, P13, P15, P17, P19, P20, P23, P24, P25 and P27) and one at Middle Management job level (P30). The participants indicated that supply chain configuration decisions at their firms pertain to supply chain network, sourcing, suppliers, inventory, manufacturing, customers and enterprise-wide IT, decision support systems, supply chain technology and supply chain data integration technology. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 3: Strategic supply chain configuration decision-making and planning* is provided.

Supply chain network decisions and planning. Five participants' firms incorporate decisions about the configuration of their supply chain networks, including two Senior Management participants (P3 and P11) and three Middle+ Management participants (P12, P17 and P20). Supply chain network decisions pertaining to product manufacturing participants P11 and P20 are displayed in the following 'Manufacturing decisions' discussion as their manufacturing decisions dictated their supply chain network decisions.

Senior Management participant P3 and Middle+ Management participant P20's firms incorporate decisions about having the right inventory and product lines in the market to serve the needs of customers and to grow the business. Participant P3 explained that their firm has "ninety thousand products, seventy-five suppliers, around about seven hundred customers in three or four different market segments" (P3). Participant P20 explained that their firm incorporate decisions about having global inventory located closer to the point of demand, stating: "need to have, as we evolve the market, have inventory or working capital closer to the point of demand and closer to the customer and consumer" (P20). Participant P20's firm also incorporate decisions about vertical integration from paddock to glass, and about which of their manufacturing plants will supply product to their global customers and supply strategies that will allow their firm to control competitive advantage and intellectual property (IP), and about strategies to minimise costs and duty import barriers:

> Some countries we'll supply bulk ingredients from our manufacturing plant in the US because we still want to control competitive advantage and IP, so we will send blends in to markets and package them locally; that gives you an opportunity to enter the country as a bulk commodity which is a different Harmonization Code and then when we package it, it becomes a different tariff classification. So we save Duties Payable by going into the country as bulk blend and then we package locally. So we are trying to evolve our strategy and minimise our input costs from a duty import barrier (P20).

Middle+ Management participant P12 explained that during corporate strategy formulation, the leadership team consult with the supply chain representative on the team regarding decisions that impact their end-to-end supply chain:

> "supply chain as part of the leadership team within [the firm] and are consulted on all decisions to understand the E2E [end-to-end] impact of a decision" (P12).

Middle+ Management participant P17's firm incorporates decisions about the configuration of their supply chain network including the "rationalisation of warehouses and supply chain services" and "outsourcing to a central purpose-built distribution centre" to make "good efficiency gains for suppliers and customers" (P17). Participant P17 explained that their firm has a broad Australian "customer footprint and complex supply chains".

Manufacturing decisions and planning. Product manufacturing participants Senior Management participant P11 and Middle+ Management participant P20, explained that their firms incorporate decisions about manufacturing which impacts their supply chain network decisions. Senior Management participant P11's firm incorporates decisions about manufacturing niche products in-house versus outsourcing commodity manufacturing, based on picking the products they make better than other manufacturers:

> So, in our case, we're making [product], which is great, but we realised that we could make certain types of [product] better than anyone else. So, we then set, established strategies to say, okay, we will manufacture niche products that are high cost in Australia, because we can do it better than anyone else, and then we'll outsource the commodity side of stuff. So, that was a critical change juncture in our 70-year-old business, the game plan was to actually identify that they're not the best at everything. Right, pick the ones we were good at, and then establish strategies [for] the commodities side of things […] (P11).

Participant P11 explained that their firms' decision to manufacture niche products in-house led to making decisions about resources, people, contacts and money to make sure they would be able to operate competitively: "if you're not competitive at it, how do you become competitive about it, basically" (P11). Participant P11 explained that their decision to outsource commodity manufacturing led to making decisions about offshore manufacturers and rationalisation of products and business centres:

> multiple suppliers, niche manufacturing, which meant a huge amount of rationalisation of products and business centres in Australia and New Zealand, for us. We went from fourteen down to seven but manufactured more than what we'd manufactured in the past (P11).

Middle+ Management participant P20's firm incorporates decisions about varying manufacturing options, where their firm supplies product from to deal with customers in local currency, and about how and where their firm will manufacture product around the customer to reduce overall cost of goods:

> our strategy is evolving at the moment that we are looking for varying manufacturing options from toll manufacturing to turnkey. […] We're looking at other options from a supply point of view, creating a supply chain hub in Southeast Asia to service our markets there to deal with our customers in local currency and remove some of their foreign exchange risk; and create and sell products from entities outside of the US. So that's largely the strategy, which is not a demand question, it is a supply equation and how we manufacture, where we manufacture, around the customer but also round reducing our overall cost of goods (P20).

Sourcing-related decisions and planning. Five participants' firms (P3, P11, P20, P25 and P30) incorporate sourcing-related decisions. Senior Management participant P3's firm incorporates decisions about supplier selection based on suppliers listed in the top 20 largest companies on the ASX with "very strong performance indicators", as well as international product sourcing decisions, to ensure that their firm's customers "get what they need" (P3). Participant P3 explained that their firm also incorporates decisions regarding sourcing the right products as well as products with value-add potential, which illustrates end-to-end supply chain decisions from suppliers to customers when seeking to source revenue-generating products:

> we look for products that require extensive technical support; ongoing support have a recurring revenue component; as part of that product that we put into the market at really strong margins; so, they're very technological (P3).

Senior Management participant P11's firm incorporates decisions about supplier selection strategies, supplier agreement terms, procurement strategy and freight strategies to minimise supply threats and costs. Middle+ Management participant P20 explained that their firm incorporates strategic sourcing decisions by considering "other sourcing options outside of the US because of barriers of entry into countries around tariffs and commodity codes" (P20). Middle+ Management participant P25's firm incorporates decisions about category management of top spend items, labour strategies, local requirements compliance and supply chain stakeholder management

to achieve alignment between the firm's supply chain strategy and corporate strategy. Middle Management participant P30's firm incorporates decisions about strategic spend solutions and emphasises the need to:

> Understand global implications of labour market trends and policies out of the ILO [International Labour Organisation], other international agreements at country level and the in-country policy agenda around cheap labour (P30).

Enterprise-wide IT and decision support systems decisions and planning. Seven participants' firms incorporate decisions about enterprise-wide IT architecture requirements, particularly enterprise resource planning (ERP) systems, including three Senior Management participants (P1, P3 and P5) and four Middle+ Management participants (P13, P15, P23 and P27).

Senior Management participant P1's firm incorporates decisions about enterprise-wide IT architecture requirements to establish "a more integrated backend system" to be able to "pull information from a central source" to measure enterprise performance more holistically (P1). Their firm is shifting from on-premises Microsoft servers to Google to utilise its suite of services and applications, via a cloud-based system with a Statistical Analysis System (SAS) Environment and are outsourcing a lot of their IT infrastructure. The reasons to shift to Google included improving cross-functional data sharing and relationships using collaboration tools and video conference tools to support their national business. Participant P1 emphasised that their firm has recognised the importance of utilising technology to drive business improvement:

> we're shifting from being a Microsoft house with our own service and hardware, and we're moving across to Google. We're well and truly on that journey at the moment, and moving to a cloud based system with a SAS Environment. We are outsourcing a lot of that IT infrastructure […] because it has been recognised the importance of using or utilising technology to drive business improvement (P1).

Middle+ Management participant P27 explained that their firm incorporates decisions about information management and planning systems and systems that need to be built, especially to improve support for maintenance and operations:

> optimisation tools we're looking to bring onboard, maintenance planning systems, operational planning and execution systems; there's the range of support type systems as well, whether it's our financial systems, our travel applications; there's a myriad of

> things that we're trying to get better at and bring new contemporary applications onboard. […] we're looking to build a new system, particularly our core business system, so like, as I say, maintenance and operations (P27).

Five participants' firms incorporate decisions about ERP systems, including two Senior Management participants (P3 and P5) and three Middle+ Management participants (P13, P15 and P23). Middle+ Management participant P15 stated: "We are currently in the process of replacing several of our major ERP systems". Senior Management participant P5's firm incorporates decisions about ERP requirements including building a new ERP system to merge two corporations to integrate business functions and to introduce new sophisticated technology solutions. Senior Management participant P3's firm incorporates decisions about ERP requirements and expressed the importance of their ERP system to track lot numbers and product movement in and out of systems and to have information readily available in case of a product recall:

> So, the ERP system and how we manage it is very important; particularly in our space, where there's a lot of regulation in healthcare where you need to be able to track your lot numbers, where things are going, their movement in and out of your systems, because if there's a recall or something like that, down the track, you need to have all that information readily available; and that ERP system has all that information, and then we use a business intelligence tool over the top of it to mine that information, as we need it (P3).

Senior Management participant P3's firm also incorporates decisions about business intelligence tools and explained: "We use COGNOS; it's an IBM business intelligence tool, and it mines data. And we're about to go onto Microsoft Power-BI, as well" (P3). Participant P3 uses business intelligent tools to support decisions to operate their multi-business environment and to monitor and gain insights about the performance of supplier/revenue-generating products which they on-sell to their customers:

> So, there is so much variation underneath the overall revenue number. So, the business intelligence tools that we use, really do help us isolate particular business sectors and manage that whole process. So, we don't treat it like, okay, next year, our strategy is to grow our business six percent. But what goes into that; a heap of stuff goes into that – different suppliers are tailing-off, some are really growing, but we mix all of those

> things together, but that's, again it comes back to that monitoring and using that BI [business intelligence] tool is hugely important (P3).

Decisions about a firm-wide ERP system and supply chain technology during corporate strategy formulation enabled Middle+ Management participant P13's firm to stay ahead of the competition with new technology-assisted methods and processes:

> Technology plays an integral role in the development of our corporate strategy and in particular where we can stay ahead of our competition by deploying new methods and processes which technology greatly assists. For example, we have recently implemented SAP ERP system which is leading edge business wide enterprise system that allows the whole business to review progress and ensure targets are on track (P13).

Middle+ Management participant P23 explained that their firm incorporates decisions about technological systems like ERP, which also play a major role during corporate strategy formulation to identify strategic supply chain opportunities to support business growth, decision making accuracy and timeliness, and supply chain strategy:

> Surely it does play a major role […] we focus on technological systems like ERPs or WMSs [warehouse management systems], they are all about accurate information to make correct decisions in a timely manner and also some inbuilt smarts to ease the decision-making process (P23).

Supply chain technology decisions and planning. Nine participants' firms incorporate supply chain technology decisions in their corporate strategies, including four Senior Management participants (P1, P4, P5 and P11), and five Middle+ Management participants (P13, P17, P19, P24 and P25).

Senior Management participant P1 explained that their firm's customer market expects their firm to have "world class or market leading technology" and that this expectation is "growing exponentially year after year" (P1). Participant P1's firm incorporates decisions about IT architecture that will allow their firm to improve reporting and collaboration options for customers in addition to improving supply chain visibility and transparency. Their firm made the decision to shift from on-premises Microsoft servers to Google via a cloud-based system to utilise its suite of services and applications to improve customer service and supply chain relationships with

customers. Participant P1 also incorporates decisions about telematics technology which enables the firm to demonstrate chain of responsibility obligations:

> The expectations to have world class or market leading technology, that demand from the market to us as a supplier or service provider in the industry, it's growing exponentially year after year. So that is a big part of why we're moving to Google, and the range of reporting and collaboration options that provides to the client, but also the level of visibility and transparency it provides (P1).

Senior Management participant P4 and Middle+ Management participants P13 and P24 explained that their firms incorporate logistics-related technology decisions. Participant P4 explained that their firm's technology decisions that relate to generating efficiency gains is a key focus area of their corporate strategy and explained:

> we are constantly evolving in terms of operating system technologies, paperless picking and packing processes, in system proof of delivery and purchase order recognition to create GL [general ledger] entries, etc. (P4).

Middle+ Management participant P13's firm also incorporated decisions regarding supply chain technology including radio frequency (RF) technology, smart path picking processes, despatch management software and other logistics technology:

> Within supply chain, we have implemented RF technology and smart path picking processes and currently are looking at the benefits of voice picking to replace the RF gun picking system. We have also utilised despatch management software which enables us to undertake carton label shipping information, advanced shipping notices for order tracking purposes and consignment note generation for proof of delivery (P13).

Participant P13 also explained that their firm has developed their own supply chain technologies for forecasting, demand management and procurement to enable demand planning capabilities:

> In demand planning we have developed our own technologies for forecasting, demand management and procurement (P13).

Middle+ Management participant P24 explained that their firm's corporate office considers "supply chain is an important part of its business" (P24) and indicated that their firm incorporates decisions about software required for tendering, contract

management and compliance and to support logistics activities: “We are currently looking for software to support our logistics activities on and off site” (P24). Similarly, Middle+ Management participant P25 also indicated that their firm incorporates decisions about technologies for tendering and procure to pay:

> And a very good example I can give you along with the suppliers and cost saving is in the past I have seen where we utilised running the procure to pay. So, by identifying our AP [Accounts Payable] rate to the suppliers – so the payment – we have meeting 100% of payment to our suppliers – we were able to use that as a leverage in our negotiations. […] the procure to pay function where we – utilising the technology to run the workflow so that once we receive the invoice, it gets sent out to site, site sign it off, send out to the warehouse, matching with the dockets and then they’re sent back to AP for processing (P25).

Senior Management participant P5’s firm incorporates decisions about procurement, supply, and sourcing technology to merge two corporations to get one version of the truth, by implementing and designing sophisticated technology solutions that will integrate functions across the business, and with suppliers and internal customers, to provide visibility, transparency and process efficiency:

> Well, from our perspective, we’re just in the middle of preparing to go live with S4 HANA, so the SAP product. And we’re also implementing selected SAP Ariba modules, which are the procurement supply modules, including B2B and the sourcing module. The backdrop to all of this is that [firm A] and [firm B] have come together as one organisation. Currently, we’ve got two separate operating systems, so the objective is to create one operating system across [firm A/B] […] so getting one truth is pretty important. […] We’re currently designing our S4 Ariba solution, so the end-to-end procurement supply piece, to try and create that one truth. And then the last one is that we’re – and this is probably one of the more important ones – well actually they’re all important, but the last one is in the area of mobility, we call it, and this is where we’re currently developing up a solution how to create a purchasing app, for all of our staff across [firm A/B]. So, you can go into an app, and it takes you through a decision tree that helps them make the correct purchase through the recognised supplier (P5).

Senior Management participant P11's firm incorporates decisions about freight software and onboarding suppliers to use the software to gain visibility of freight in transit:

> we were able to get software to do it - the hard part was getting [supplier] to come onboard; but once we got them onboard, we could see what was in the container (P11).

Middle+ Management participant P17 explained that their firm incorporates decisions about the "establishment of the National Product Catalogue" which allows their firm to share health care product data online with trading partners (P17). Participant P17 explained that their firm manages "a broad range of capital and disposable SKUs [stock keeping units] 100,000+" (P17).

Middle+ Management participant P19 explained that their firm incorporates decisions about customer-focused technology that can: "expand and broaden the suite of services that we can offer and increase profitability" (P19). Participant P19 explained that supplier-focused technology influences corporate strategy:

> Supply chain is always looking for ways to integrate more technology into the business. Usually this is in the form of software programs that speed up the requisition to order process, gets goods to site faster, involve less sets of hands (through automation) and reduce manpower costs (P19).

Participant P19 emphasised that return on technology investment is paramount at their firm, especially since their firm operates in a cyclic industry "that often has deep troughs of inactivity" (P19) and therefore the business case needs to justify the investment and expected benefits:

> The business case has to stack up however. Introducing new technology usually involves in an injection of capital, so payback has to be on the near horizon (P19).

Supply chain data integration technology decisions and planning. Senior Management participant P3 and Middle+ Management participant P20's firms incorporate decisions about customer-focused data integration technology to integrate data sharing processes with major customers using Electronic Data Interchange (EDI) technology. Participant P3's firm incorporated a decision to utilise EDI technology with a major customer through the ordering process to improve product flows for both firms:

> We're also about to embark on one of our big customers, an EDI program where that ordering process and that technology will help both businesses flow the product through their systems a lot better, rather than your traditional warehousing and that type of thing (P3).

Middle+ Management participant P20's firm incorporate decisions about EDI capability to integrate technology with mature retailers:

> once you're in the market like a more developed mature market like Australia, where you're dealing with mature retailers like [Large Retailer A] and [Large Retailer B], obviously we need to look at things like EDI capability (P20).

Participant P20's firm has a complex global supply chain network that services mature business customers, as well as emerging consumer markets directly online and indirectly through distributors and partners who are also business customers. Participant P20's firm incorporate technology decisions to service all global markets for sales and order processes which includes selecting distributors and partners with large online platforms to access and serve their target markets:

> So there's certainly a component around B2C [business-to-consumer] and we certainly recognise that technology plays a huge part in B2C in the markets where we're heavily B2C weighted which is largely Asia Pacific and largely China, Japan, Taiwan, South Korea, Hong Kong and some of Southeast Asian markets in Singapore, Malaysia and the Philippines. So in a mature market it's around B2B and how we work with technology on our key customers and then in the emerging markets its more around B2C and who we partner with, whether we do that via distributors and partners, whether that's ASIA eCommerce platform Lazada, largest player and Amazon etc is a minor player in ASIA Pacific, or JD.com in Hong Kong etc and we do also own a brand in Europe […] which is solely that B2C business, so we're looking where that business model can be listed and loaded into other markets (P20).

Table 4.5 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 3: Strategic supply chain configuration decision-making and planning*, using representative supporting data from the findings. Sensing, seizing, and transforming capabilities were discovered in the data. As an additional insight that also helps to answer the research problem, **Table 4.5** also identifies additional transforming capabilities to acknowledge the implementation of strategic

supply chain reconfiguration decisions as identified in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 3 and the additional insights is provided in Chapter 5.

Table 4.5: Summary of dynamic capabilities and microfoundations associated with *Theme 3: Strategic supply chain configuration decision-making and planning*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Sensing *sense and shape opportunities and threats*	Entrepreneurial (Teece 2009) Strategic supply chain sensing Sensing threats (Teece 2009) Customer orientation (Vijaya et al. 2019; Zhou & Li 2010) Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019)	Market monitoring • Market trends • Technology scanning (Khan et al. 2020) Learning (Khan et al. 2020; Teece 2009)	• Sensing, learning, and understanding importance of technology requirements: to measure and monitor enterprise performance, drive business improvement, improve cross-functional data sharing, improve support for maintenance and operations (P1, P3, P27) • "Understand global implications of labour market trends and policies out of the ILO [International Labour Organisation], other international agreements at country level and the in-country policy agenda around cheap labour" (P30)
		Sensing strategic supply chain threats to competitive advantages Interpreting available information (Khan et al. 2020; Teece 2009)	• considers "other sourcing options outside of the US because of barriers of entry into countries around tariffs and commodity codes" (P20) • "if there's a [product] recall or something like that, down the track, you need to have all that information readily available. And that ERP system has all that information, and then we use a business intelligence tool over the top of it to mine that information, as we need it" (P3)
		Technology scanning • Customer needs • Technological developments (Khan et al. 2020) Detect how customers are shifting (Teece 2009) Sensing emergent technology threats (Khan et al. 2020; Patrício et al. 2019; Suddaby et al. 2019; Teece 2009; Vijaya et al. 2019)	• "We're also about to embark on one of our big customers, an EDI program where that ordering process and that technology will help both businesses flow the product through their systems a lot better, rather than your traditional warehousing and that type of thing" (P3) • online "National Product Catalogue" (P17) • "where you're dealing with mature retailers like [Large Retailer A] and [Large Retailer B], obviously we need to look at things like EDI capability" (P20); senses technology requirements relevant to the maturity of different markets • "The expectations to have world class or market leading technology, that demand from the market to us as a supplier or service provider in the industry, it's growing exponentially year after year" (P1)
		Sensing opportunities for new services (Khan et al. 2020; Teece 2009)	• customer-focused technology that can "expand and broaden the suite of services that we can offer and increase profitability" (P19)
		Processes to identify target market segments (Teece 2009)	• "markets where we're heavily B2C weighted which is largely Asia Pacific and largely China, Japan, Taiwan, South Korea, Hong Kong and some of Southeast Asian markets in Singapore, Malaysia and the Philippines. So in a mature market it's around B2B and how we work with technology on our key customers and then in the emerging markets its more around B2C and who we partner with, whether we do that via distributors and partners" (P20)
Seizing *seize opportunities*	Strategic supply chain configuration decision-making and planning Strategic supply chain performance transformation decision-making	• Revenue architecture decision-making • Selecting the technology architecture (Teece 2009)	• firm uses "products that require extensive technical support; ongoing support have a recurring revenue component; as part of that product that we put into the market at really strong margins; so, they're very technological" (P3) • "So in a mature market it's around B2B and how we work with technology on our key customers and then in the emerging markets its more around B2C and who we partner with, whether we do that via distributors and partners, […] so we're looking where that business model can be listed and loaded into other markets" (P20) • "establishment of the National Product Catalogue" which allows their firm to share health care product data online with trading partners (P17)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
	Top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) Stakeholder management (Sodhi 2015) Inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019) Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019)		• "We are currently in the process of replacing several of our major ERP systems" (P15)
		Strategic planning to seize strategic supply chain network opportunities Strategic planning to seize supply chain technology opportunities	• incorporate sourcing-related decisions (P3, P11, P20, P25, P30) • incorporate decisions about enterprise-wide IT architecture requirements (P1, P3, P5, P13, P23, P27) • incorporated a decision to utilise EDI technology with a major customer (P3) • decision to "supply bulk ingredients from our manufacturing plant in the US because we still want to control competitive advantage and IP"; "have inventory or working capital closer to the point of demand" (P20) • decision to manufacture niche products in-house led to making decisions about resources, people, contacts and money to make sure they would be able to operate competitively: "if you're not competitive at it, how do you become competitive about it, basically" (P11)
		Building loyalty and commitment • Effectively communicating (Teece 2009) Seizing strategic supply chain opportunities while maintaining commitment of key supply chain-focused stakeholders	• "supply chain as part of the leadership team within [the firm] and are consulted on all decisions to understand the E2E impact of a decision" (P12) • supply chain personnel working with top management (P3, P5, P11, P12, P20, P27)
		Strategic planning • Finding strategic partners (Khan et al. 2020)	• supplier selection decisions (P3, P11) • selecting distributors and partners with large online platforms to access and serve target markets (P20) – "who we partner with, whether we do that via distributors and partners" (P20)
		Collaboration (Khan et al. 2020)	• supply chain stakeholder management (P25) • "why we're moving to Google, and the range of reporting and collaboration options that provides to the client, but also the level of visibility and transparency it provides" (P1)
Transforming *transform, reconfigure, and manage threats*	Strategic management-supply chain strategic alignment	Decentralised strategic decision-making to bring top management closer to strategic supply chain elements Combining strategic management and strategic supply chain skills and knowledge Supply chain knowledge transfer to top management	• "supply chain as part of the leadership team within [the firm] and are consulted on all decisions to understand the E2E impact of a decision" (P12) • bringing top management closer to supply chain requirements (P3, P5, P11, P12, P20, P27)
Note: *Acknowledging implementation of transforming capabilities which is discussed in Chapter 5.*			
Transforming *transform, reconfigure, and manage threats*	Resource management (Sirmon & Hitt 2009; Vijaya et al. 2019) Strategic supply chain reconfiguration Outsourcing capability (Scherrer-Rathje et al. 2014; Vijaya et al. 2019)	Maintain competitiveness through reconfiguring supply chain resources	• moving inventory closer to the point of demand (P20) • reconfiguring resources to operate competitively due to deciding to manufacture niche products in-house (P11)
		Maintain competitiveness through supply chain rationalisation Reconfiguring operations from in-house to outsourcing	• "rationalisation of warehouses and supply chain services" and "outsourcing to a central purpose-built distribution centre" to make "good efficiency gains for suppliers and customers" (P17) • decision to outsource commodity manufacturing led to making decisions about offshore manufacturers and rationalisation: "multiple suppliers, niche manufacturing, which meant a huge amount of rationalisation of products and business centres in Australia and New Zealand, for us. We went from fourteen down to seven" (P11). • "outsourcing a lot of that IT infrastructure" (P1)
		Technological upgradation (Khan et al. 2020)	• building a new ERP system to merge two corporations to integrate business functions and to introduce new sophisticated technology solutions (P5)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
	Strategic supply chain performance transformation Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019)	Reconfiguring assets to cope with firm growth (Kareem & Alameer 2019; Khan et al. 2020; Suddaby et al. 2019; Teece 2009)	• "we're shifting from being a Microsoft house with our own service and hardware, and we're moving across to Google" (P1) • "recently implemented SAP ERP system which is leading edge business wide enterprise system that allows the whole business to review progress and ensure targets are on track" (P13)
		Reconfiguring capabilities to cope with technology change (Kareem & Alameer 2019; Khan et al. 2020; Suddaby et al. 2019; Teece 2009) Reconfiguring strategic supply chain capabilities to cope with technology change Best practices adaptation • New business practices • New work methods (Khan et al. 2020) Improving strategic supply chain practices	• "we're moving across to Google […] it has been recognised the importance of using or utilising technology to drive business improvement" (P1); to use Google's suite of tools to improve cross-functional data sharing and relationships using collaboration tools and video conference tools to support their national business (P1) • onboarding suppliers to use freight software to gain visibility of freight in transit: "we were able to get software to do it - the hard part was getting [China supplier] to come onboard; but once we got them onboard, we could see what was in the container" (P11) • "an EDI program where that ordering process and that technology will help both businesses flow the product through their systems a lot better, rather than your traditional warehousing and that type of thing" (P3) • "we can stay ahead of our competition by deploying new methods and processes which technology greatly assists" (P13)

4.2.1.4. *Theme 4: Strategic supply chain performance objectives*

Theme 4 was established from the question pertaining to the incorporation of strategic supply chain performance objectives into corporate strategy. Sixteen participants provided perceptions and insights regarding the incorporation of strategic supply chain performance objectives into corporate strategy, including four at Senior Management job level (P3, P4, P5 and P11), 11 at Middle+ Management job level (P12, P13, P14, P15, P16, P17, P19, P20, P22, P23 and P25) and one at Middle Management job level (P30). The reasons for incorporation not only pertained to ensuring that the firm performs as required within its strategic supply chains but to also gain and sustain competitive advantage. The range of strategic supply chain performance objectives identified in the data covered the end-to-end supply chain from supplier to operations to customer. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 4: Strategic supply chain performance objectives* is provided.

In contrast, Middle+ Management participant P21 explained that their firm's supply chain strategy includes supply chain performance objectives that are aligned with and

support their firm's overall business strategy. An alternative perspective was also provided by Senior Management participants P2 and P8 who explained that strategic supply chain performance objectives are not incorporated in their firm's respective corporate strategy. Senior Management participant P2 reiterated his belief that it would be more relevant for a firm that specialises in supply chain as their primary business.

The analysis of the data from the 16 participants is now provided. Senior Management participant P3 stated: "Our company specialises a lot in bringing new niche products into market that bring a technology edge to a business" (P3). Participant P3 indicated they incorporate strategic supply chain performance objectives pertaining to "quality of product", "performance of product in the market", "sourcing the right products" for customers, working with suppliers with "very strong performance indicators", product recall management, stock levels, product supply chain management, product flow (P3):

> We end up very much in a space where technology shift is a very real thing, and that comes down to things like automation or quality of product or performance of product in the market. […] how we manage our recalls, how we have our stock levels here, how we service their product in terms of keeping it going, and basically, managing that supply chain, because if we don't do it, the end user or customer doesn't get what they need (P3).

Senior Management participant P11 described that during corporate strategy formulation at their firm, the owners of the firm on the Board set a profit improvement performance target, which participant P11 turns into a stretch target and then works with divisional managers to identify ways to remove cost from the supply chain. Upon conducting research "over a three-month timeframe" the divisional managers and participant P11 develop: "specific objectives that are measurable, and that's how I'd measure the performance of my division, going forward from there" (P11). Participant P11 explained that their firm's strategic supply chain performance objectives include financial performance, freight costs, supply chain costs and outsourcing manufacturing and many other objectives. Participant P11 also emphasised the importance of identification of objectives and understanding the real cost of business to ensure performance improvement objectives are focused on the right area to make an impact:

> we'd sit at the Board level for a few days and come up with whatever, the owners - I want more millions of dollars profit, please. […] I would bring all my divisional managers […] and sit there and go, okay, what we need to find, for example, I need to find, if the boss has set a target for four-million dollars improvement in performance, I'd want eight, so how do we do it. And we'd just totally strip apart the business, and try and put it back together and say, okay, well if, for example, we looked at freight. […] so we pulled out [x]-million dollars in freight costs by changing the way we did things. We outsourced things instead of having it ourselves […]. Yeah, so those things I created in the […] business, we'd rationalise […] and it made it easy to manufacture. So, I can make you the fanciest […] in the world – it's a [beep] of a thing to make. Or I can make you a really smart looking […] that sells lots, and it's really easy to make. So, you're winning in manufacturing costs, and then you win by actually getting the volume through the shopfronts. The other one that goes with that that needs to be done […] identify the real cost of each stage. […] And there's an identification of those objectives, once you've got your objectives and tactics in place, what's the real cost of your business, because you may end up working in the wrong area and make no impact (P11).

Senior Management participant P11 explained the importance of "understanding the business capabilities" and that "executive needs to understand the capabilities" and they realised that they "could make certain types of […] better than anyone else" (P11). Their firm also identified that they are not the best at manufacturing all their products and this realisation led to identifying opportunities to outsource easy-to-make products. Hence participant P11's firm identified the firm's greatest manufacturing capabilities and manufactured those products in-house and identified the firm's weakest manufacturing capabilities and manufacturing cost savings opportunities and outsourced the manufacture of those products.

Middle+ Management participant P12 explained that the supply chain representative on the leadership team at their firm is consulted on decisions regarding strategic supply chain performance objectives during corporate strategy formulation so that the leadership team understands the end-to-end supply chain impact of a decision. Their firm incorporates performance objectives pertaining to achieving "unlimited ranging, perfect orders and reduced lead times" (P12). Participant P12 explained that technology is driving the achievement of these performance objectives and further

elaborated that "technology is an enabler to ensuring supply chain hits its targets including the perfect order" (P12).

Middle+ Management participant P13 explained that at their firm, corporate strategy formulation is conducted during two stages. Stage one involves strategic planning and stage two involves setting performance objectives in align with their country-level and global-level strategic planning processes. As part of the executive team, participant P13 explained that after their initial one-week session offsite for strategic planning during the year, the team meet again later in the year to set performance objectives for the business including supply chain metrics:

> As an executive team, we again meet later in the year, each year to set performance objectives for the business which includes of course supply chain metrics. Whilst [this firm] is held in the highest regard and has an enviable reputation for the quality of its products, we pride ourselves on the quality of services that supply chain delivers for the business. To that end, we continually review our service offering to ensure we have competitive advantage (P13).

The supply chain performance of participant P13's firm is monitored by their firm's global head office and their metrics are reviewed and approved by head office following the "country strategic planning session" (P13). The continual improvement of supply chain performance is expected by the global head office with performance objectives met by year end each year (P13).

> [Global head office] monitors supply chain performance worldwide through 60 countries and similarly to what occurs within [Australia office], each year following the country strategic planning session, [Global head office] requires us to submit supply chain performance metrics for the following year which they review and approve. Supply chain performance metrics must be on a continual improvement course each year, so strategies need to be developed to ensure the year end objectives are met (P13).

Middle+ Management participant P14 explained that their firm incorporates strategic supply chain performance objectives into their corporate strategy to ensure "accountability and measurement" and achieve this by having "senior level management involved in strategic supply chain management" (P14). Middle+ Management participant P15 explained that their firm incorporates strategic supply

chain performance objectives into their corporate strategy by ensuring that "there are suitable measures in place to provide insight around supply chain performance" and by including:

> performance objectives, such as conversion cost, transport cost, stock turns and so on and have efficient and effective methods of capturing and reporting the data (P15).

Participant P15 also explained that the development of strategic supply chain performance objectives at their firm requires "detailed knowledge of how the business operates" (P15):

> the development of strategic supply chain performance objectives is a business management function based on knowledge of how the business operates and what drives business performance (P15).

Middle+ Management participant P16 explained that their firm incorporates strategic supply chain performance objectives into their corporate strategy by using the supply chain KPIs that are: "included in our Board dashboard" (P16). Participant P16 explained that technology has played a role in achieving strategic supply chain performance objectives using integrated and effective technology that has enabled their firm to become leaner and more customer focused (P16).

Middle+ Management participant P17 explained that their firm incorporates strategic supply chain performance objectives including "DIFOTQ – deliver in full, on time and with product quality at the level they contracted to receive" as "supply chain is seen as an integral part of delivering an outstanding customer experience" (P17). Participant P17 stated: "Products delivered are life enhancing, life extending and, in some cases, lifesaving" (P17). Participant P17 explained that "when performance is at best practice levels" and "where supply chain performance is [consumer/customer] business critical", this increases their firm's ability to "enter into a negotiated [supply] arrangement rather than compete with the market" (P17).

Middle+ Management participant P22 explained that their firm incorporate strategic supply chain performance objectives pertaining to supply chain costs which is how they form their supply chain budget. Participant P22 emphasised that their supply chain input is important to ensure that their supply chain costs will be covered including any initiatives or offsets:

> we try to align as much as possible, that the leadership team really have some input into that corporate plan; you've got wage increases or we've got union changes or whatever, there's no way we're going to be able to it for that cost and if that cost goes up, we should roll it up into the corporate plan, net of any initiatives or offsets that we're going to have as well (P22).

Similarly, Middle+ Management participant P25 explained that their firm incorporate strategic supply chain performance objectives pertaining to top spend items, supply chain labour strategies, supplier and contractor performance, procure-to-pay cost savings and supply chain performance cost savings.

Middle+ Management participant P23 indicated that their firm's strategic supply chain performance objectives are driven through their strategic and operational supply chain initiatives to create efficiencies to ensure that the business is successful in the market. Participant P23 explained that there is a direct correlation between their business's success and their supply chain success or effectiveness:

> The efficiencies created through strategic and operational supply chain initiatives is going to affect the successful existence of the business in the market. In our business there is a direct proportional relationship between success of the business and success or effectiveness of the supply chain (P23).

Middle+ Management participant P19 explained that their firm incorporate strategic supply chain performance objectives that are tailored to help their industrial services teams to achieve significant financial business objectives and include a range of performance objectives that focus on product cost, inventory, transport and logistics cost, headcount cost, on time delivery performance. Participant P19 explained that performance objectives also pertain to holding special global initiatives that focus on supply chain performance objectives to reduce inventory, supplier costs and operating costs. Their firm also has a manufacturing business which incorporate supply chain performance objectives that track, review, and reduce raw material costs. Participant P19 emphasises that: "effective supply chain support is vital to the business success" (P19):

> So heavy focus is on product cost, lean and managed inventory, mobilising, and de-mobilising (transport and logistics) cost, headcount cost, on time delivery performance. Supply chain objectives will therefore always be tailored to enable the

> services businesses to meet those criteria. […] special global initiatives ran at various times of the year to focus on particular areas. Inventory reduction, payment terms, supplier cost out etc are common to reduce operating costs. […] Supply chain is heavily integrated into our manufacturing business (tracking, reviewing, and driving out raw material costs). In particular for our services business that is continually moving from remote site to remote site doing [type of service] programs for big clients, effective supply chain support is vital to the business success (P19).

Senior Management participants P4 and P5, and Middle+ Management participant P19 explained that their firms incorporate technology related strategic supply chain performance objectives. Participant P4 explained that a key focus area of their corporate strategy includes technologies that generate efficiency gains in logistics operations. Participant P5 explained that their firm has incorporated substantial strategic supply chain performance objectives and plans to achieve these objectives through the implementation of a new ERP system, procurement technology and by designing sophisticated technology solutions. Participant P5 explained that their firm is seeking to address cross-functional gaps, brought about by merging two corporations, with the aim to integrate business functions stating: "so that cross-functionally, you've got an efficient integration and transactionally, in your business, including the sharing of information" (P5). Other performance objectives stated by participant P5 include: "efficient sourcing activity", "automation of the sourcing process" for suppliers to respond to tenders, expediting the supplier evaluation and negotiation process, "much more sophisticated contract management system that's properly integrated across all areas of our business", "monitor performance of contractors", "reap transactional efficiencies from dealing with our suppliers", provide contract management people with "visibility and transparency of those transactions, so they can monitor spend", "real-time information about what's happening with, transactionally with our customers, including delivery of goods to our warehouses", "lowering our inventory levels", creating "efficiency for our clients", "eliminate a lot of the maverick type spend, and it's also there to make efficient, the purchasing process", "efficient requisitioning for our people", "we'll have the analytics capability to go to a whole another level of value and savings creation", "ensure that our data and data governance is of the highest standard" (P5). Participant P5 explained that their

firm has a multi-million-dollar supply chain cost savings target: “Probably the simplest way to put it is we’ve got a target of [xx]-million to achieve by 2020” (P5).

Middle+ Management participant P19 explained that their firm incorporates technology related supply chain performance objectives by identifying technology and software that can: streamline operations; reduce running costs; increase automation; speed up ordering, shipping, receiving and payment processes; provide better and faster access to data pertaining to supplier performance, spend, inventory and financial information, to identify opportunities to reduce cost, waste and headcount.

> Technology can certainly influence corporate strategy […] it can streamline operations, reduce running costs […] Additional software programmes that give better and faster access to data - supplier performance, spend analysis, inventory management and financial information - are now heavily used in our business. […] technology is used to increase automation, speed up the ordering, shipping, receiving and payment process which in turn reduces headcount. Also, in the provision of data which better enables identification of cost out opportunity, waste, and performance (P19).

Middle+ Management participant P20 explained that their firm incorporates strategic supply chain performance objectives into their corporate strategy that pertain to aggressively growing their markets, leveraging demand opportunities, having the right inventory in the market, strengthening international sales, controlling the supply chain longer in the firm’s title, and selling market to distributors and customers to pursue a global ambition to accelerate international growth:

> the objective is to continue to aggressively grow these markets and leverage the demand opportunities in the space of […] - it’s growing exponentially, particularly in developing Asia Pacific countries. […] That’s largely the aim and it’s about having the right inventory present in the market […] We’re ambitious in terms of doubling down our international sales. So to do that, we can’t do more of the same in shipping everything out of the US where we don’t have any skin in the game. E.g. who is the importer on record; who’s holding the title of goods. So we’re now working back up the supply chain to control the supply chain longer in [firm]’s title, our entity and then just selling market to our distributors and customers. That’s the strategy and that’s what under pins the global ambition of accelerating our international growth (P20).

Middle Management participant P30 explained that their firm incorporates strategic supply chain performance objectives into their corporate strategy that pertain to the development of their new firm-wide performance management framework including performance reporting and the building of specialist expertise.

Table 4.6 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 4: Strategic supply chain performance objectives*, using representative supporting data from the findings. Sensing, seizing, and transforming capabilities were discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 4 is provided in Chapter 5.

Table 4.6: Summary of dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 4: Strategic supply chain performance objectives*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Sensing *sense and shape opportunities and threats*	Entrepreneurial (Teece 2009) Strategic supply chain performance sensing Customer orientation (Vijaya et al. 2019; Zhou & Li 2010)	Idea generation • Brainstorming sessions (Khan et al. 2020)	• "I would bring all my divisional managers […] and sit there and go, okay, what we need to find, for example, I need to find, if the boss has set a target for four-million dollars improvement in performance, I'd want eight, so how do we do it. And we'd just totally strip apart the business, and try and put it back together and say, okay" (P11)
		Scanning technological developments (Khan et al. 2020) Detecting strategic supply chain performance opportunities	• incorporates technology related supply chain performance objectives by identifying technology and software that can streamline operations and reduce running costs (P19) • "We end up very much in a space where technology shift is a very real thing, and that comes down to things like automation or quality of product or performance of product in the market" (P3) • technology has played a role in achieving strategic supply chain performance objectives using integrated and effective technology that has enabled their firm to become leaner and more customer focused (P16) • "In our business there is a direct proportional relationship between success of the business and success or effectiveness of the supply chain" (P23) • "technology is an enabler to ensuring supply chain hits its targets including the perfect order" (P12)
		Sensing threats to services (Khan et al. 2020; Patrício et al. 2019; Suddaby et al. 2019; Teece 2009; Vijaya et al. 2019) Monitoring and sensing threats to strategic supply chain performance	• "we continually review our service offering to ensure we have competitive advantage" (P13) • "monitor performance of contractors" (P5) • supply chain leadership team identifies the end-to-end supply chain impact of decisions (P12)
Seizing *seize opportunities*	Top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013)	Strategic planning and decision-making about strategic supply chain performance objectives	• 16 participants incorporate strategic supply chain performance objectives into corporate strategy (P3, P4, P5, P11, P12, P13, P14, P15, P16, P17, P19, P20, P22, P23, P25, P30) • incorporates strategic supply chain performance objectives pertaining to achieving "unlimited ranging, perfect orders and reduced lead times" (P12) • "Supply chain performance metrics must be on a continual improvement course each year, so strategies need to be developed to ensure the year end objectives are met" (P13)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
	Stakeholder management (Sodhi 2015) Strategic supply chain performance objectives development for corporate strategy Strategic supply chain performance management		• "Supply chain objectives will therefore always be tailored to enable the services businesses to meet those criteria" (P19)
		Building loyalty and commitment • Effectively communicating (Teece 2009) Seizing strategic supply chain performance opportunities while maintaining commitment of key supply chain-focused stakeholders	• supply chain representative on the leadership team is consulted on decisions regarding strategic supply chain performance objectives (P12) • supply chain representative on the executive team "to set performance objectives" (P13) • "senior level management involved in strategic supply chain management" (P14)
Transforming *transform, reconfigure, and manage threats*	Strategic management-supply chain strategic alignment Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007)	Decentralised strategic decision-making to bring top management closer to strategic supply chain elements Combining strategic management and strategic supply chain skills and knowledge Supply chain knowledge transfer to top management	• supply chain representative on the leadership team is consulted on decisions regarding strategic supply chain performance objectives so that the leadership team understands the end-to-end supply chain impact of a decision (P12) • with a supply chain representative on the executive team: "As an executive team, we again meet later in the year, each year to set performance objectives for the business which includes of course supply chain metrics" (P13) • incorporates strategic supply chain performance objectives into corporate strategy by having "senior level management involved in strategic supply chain management" (P14) • help top management develop performance objectives by understanding how supply chain improvements impact supply chain performance (P11, P20) • "the development of strategic supply chain performance objectives is a business management function based on knowledge of how the business operates and what drives business performance" (P15)

4.2.1.5. Research Issue 1: Dynamic Capabilities and Microfoundations

Appendix I lists the sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus* per key theme. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Research Issue 1 is provided in Chapter 5.

4.2.2. *Research Issue 2: Corporate Strategy Cascading – to perform as required*

Research Issue 2: When executives at top performing B2B firms in Australia seek to ensure that the firm performs as required within its strategic supply chains, what sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy cascading?

Research Issue 2 sought to explore the perceptions, opinions, and perspectives of the research participants regarding how corporate strategy cascading is conducted at their

B2B firms to ensure that the firm performs as required within its strategic supply chains; and sought to identify dynamic capabilities and microfoundations of dynamic capabilities associated with this process. All 30 participants provided perceptions and insights in relation to Research Issue 2, which enabled good representation in the analysis. One key theme emerged from the data (Theme 9) and Themes 5, 6, 7, 8, 10 and 11 were established from the questions. The following seven key themes represent the data analysis of *Research Issue 2: Corporate Strategy Cascading – to perform as required*:

- Section 4.2.2.1 presents *Theme 5: Corporate strategy rollout*
- Section 4.2.2.2 presents *Theme 6: Strategic performance alignment*
- Section 4.2.2.3 presents *Theme 7: Strategic performance management system technology*
- Section 4.2.2.4 presents *Theme 8: Cross-functional relationships and alignment*
- Section 4.2.2.5 presents *Theme 9: People performance strategic alignment*
- Section 4.2.2.6 presents *Theme 10: Addressing behavioural issues*
- Section 4.2.2.7 presents *Theme 11: Strategic supply chain relationships and alignment*

4.2.2.1. *Theme 5: Corporate strategy rollout*

Theme 5 was established from the question pertaining to cascading and rolling out corporate strategy firm-wide, to ensure that the firm performs as required within its strategic supply chains. All 30 participants provided perceptions and insights regarding corporate strategy deployment and alignment through corporate strategy rollout (Theme 5), strategic performance alignment (Theme 6) and/or by using strategic performance management system technology (Theme 7). This section addresses Theme 5. Fourteen participants provided perceptions and insights regarding cascading and rolling out corporate strategy firm-wide, including five Senior Management participants (P1, P3, P4, P7 and P9), and seven Middle+ Management participants (P13, P15, P17, P19, P20, P22 and P27), and two Middle Management participants (P29 and P30). This included 10 participants from firms with a corporate strategy with a strategic supply chain focus. Among the participants there was a consensus that their firms roll out and cascade corporate strategy top-down throughout each level of the

firm and down to each employee. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 5: Corporate strategy rollout* is provided.

Two Senior Management participants (P1 and P4) explained that their firm's rollout corporate strategy commencing with top management communicating the strategy firm-wide and then proceed with the cascade throughout the firm and down to each employee. Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Senior Management participant P1's firm incorporates strategic supply chain considerations into their corporate strategy including supply chain configuration decisions regarding enterprise-wide IT and supply chain technology. Participant P1 explained that their firm start the cascade of corporate strategy through their national firm with a national roadshow performance led by their Chief Executive Officer (CEO) and an executive management team member to communicate the strategy to "get it out to the broader business":

> In terms of a corporate strategy, the initial communication of it, to start the cascade through the business, there was a roadshow performance by our Chief Executive Officer, a member of our executive management team, that was flying all around the country. We're a national business with offices in each of the major capital cities, including Darwin. At the time that the corporate strategy was devised, that was step one of the communication to get it out to the broader business (P1).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Senior Management participant P4's firm incorporates strategic supply chain considerations into their corporate strategy including strategic supply chain performance objectives and supply chain configuration decisions regarding supply chain technology. Participant P4 explained that the success of their firm's corporate strategy rollout commences with Board and CEO alignment, a "well-established stewardship" and communication of the corporate strategy to management and staff and their commitment to the strategy (P4). Participant P4 outlined a comprehensive set of processes their firm uses to facilitate the corporate strategy rollout: "we adopt several processes to facilitate this" (P4). Participant P4 explained that after their Board and CEO establish the corporate strategy, the executive team then holds a three-day management strategy workshop each year to "derive and revisit the strategy objectives

and determine successful, redundant and amendable objectives" (P4). Participant P4 emphasised that agreed strategic objectives and values are communicated firm-wide "to ensure our entire eco system is subscribing to, adopting and holding ourselves to account for these" (P4). Their corporate strategy is cascaded from the CEO to the executive team, then from the executive team to senior leadership, throughout the business and down to each employee. Participant P4 stated that their firm's "corporate strategy cannot be effectively implemented without support and commitment by all employees, particularly senior and middle management" and that its success is dependent on "regular measuring and adjusting of strategic objectives" (P4).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Senior Management participant P3's firm incorporates strategic supply chain considerations into their corporate strategy including strategic sourcing strategy, customer-focused and supplier-focused supply chain strategies, strategic supply chain performance objectives and supply chain configuration decisions regarding supply chain data integration technology, enterprise-wide IT and decision support systems, and supply chain network. Senior Management participant P3 explained that their corporate strategy is cascaded from his senior management position to the entire management team per department as relevant, who then cascade it within each department to each employee as relevant. Similarly, Senior Management participant P7 explained that the business objectives within their corporate strategy are cascaded firm-wide, down to each level using their SAP ERP system and internal staff performance management system.

Three participants explained that the rollout of their firm's corporate strategy is through developing and rolling out business plans that align to the strategy, including Senior Management participant P9 and Middle Management participants P22 and P29. Senior Management participant P9 explained their firm's comprehensive approach to firm-wide corporate strategy rollout which entails developing business plans to deliver the strategy, with strategic actions built into the plans including using external forecasts to develop business performance metrics and then metrics for processes and individuals. Participant P9 explained that this approach is used to communicate the corporate strategy by involving their employees "in identification, adoption and

achieving the metrics" and through their involvement they become informed on the strategy (P9):

> An important tool in delivering the strategy through the business are the business plans including capital, operational budgets, productions, and sales volume plans. The strategic actions are built into these plans and together with external forecasts (e.g. margins, exchange rates etc.) are used to develop business performance metrics for the years covered by the plan (P9).

Senior Management participant P9 explained that they undertake a broad approach to communicate the corporate strategy "as part of a wider story that includes purpose, the wider framework, risks and mitigations, benefits for the business and the individual" (P9). Middle Management participant P29 explained that their firm's corporate strategy is rolled out through business plans which align to Key Result Areas, from which performance management plans for senior leaders are established in alignment with the business plans.

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P22's firm incorporates strategic supply chain considerations into their corporate strategy including strategic supply chain performance objectives. Participant P22 explained their firm's comprehensive approach to firm-wide corporate strategy rollout which commences from the firm's group level, then down to their major business units, which are known as separate businesses in the market. Each major business unit conducts very high-level corporate planning and these corporate plans are endorsed and signed off by firm's group level to ensure alignment. Participant P22 states: "We spend a good three to four months on those [corporate plans] every year and that's done at a very high level, but ultimately they end up forming your budgets as such for the year" (P22). Corporate plans are then turned into detailed business unit plans which are then cascaded down into the divisions within the business units to create operating plans for the divisions, with technology assisting with the cascade:

> That is at a very high level corporate planning; that corporate planning then turns into business unit detailed plans, by the business unit e.g. [firm], as you come further down; then gets cascaded down into the divisions within that business unit, so Supply Chain in this case – while we don't generate revenue, we do generate the cost that goes

> underneath it; therefore we have to align ourselves with what the cost expectations are and also align ourselves with what level of infrastructure or labour or technology we need to provide to achieve that outcome at the certain cost point or cost as a percent of sales (P22).

Participant P22 explained that the cascade continues with their firm's General Manager of Supply Chain then taking "the overall business unit plan and the corporate plan and disseminates that down into actionable objectives for his leadership team for the year" (P22). Participant P22 elaborated:

> The GM [General Manager] of Supply Chain in effect that breaks apart the corporate plan and the business unit plan and they break it down into its logical domestic and picking and inbound and transport. And then each of the leadership team is responsible for each of those streams then breaks it down further, all the way down to the actionable level (P22).

Participant P22 elaborated that the cascade continues all the way down "to the team members who are actually executing the task" (P22) and stated: "That's how we kind of get it down to the lowest levels" (P22).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P13's firm incorporates strategic supply chain considerations into their corporate strategy including supply chain strategic objectives, strategic supply chain performance objectives and supply chain configuration decisions regarding enterprise-wide IT and supply chain technology. Participant P13 explained that the corporate strategy is rolled out with core competencies determined for each business area, then each department head develops metrics to ensure that the objectives of the department and the firm are met. Their firm communicates the corporate strategy using SharePoint "as a central communications tool where all objectives and performance metrics are housed and viewed by all" (P13).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P15's firm incorporates strategic supply chain considerations into their corporate strategy including strategic supply chain performance objectives and supply chain configuration decisions regarding supply chain network. Participant P15 explains how their firm rolls out corporate strategy firm-wide through each

division and department to each person, and provides an example and also mentioned that their firm "does this well" (P15):

> corporate strategy outputs business objectives which are then translated through each division and department into relevant measures for each person. […] how this works is where a corporate strategy objective to increase production output by 5% is translated to a division, a business unit, a department, and then a shift crew, and hourly/daily/weekly/monthly/etc production rates are recorded and compared against the target (P15).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P17's firm incorporates strategic supply chain considerations into their corporate strategy including supply chain projects and improvement programs, customer-focused supply chain strategies, strategic supply chain performance objectives and supply chain configuration decisions regarding supply chain technology and supply chain network. Participant P17's response regarding corporate strategy rollout focused on the rollout of their firm's supply chain projects and improvement programs that they incorporate into corporate strategy. Participant P17 expressed the importance of active and vocal leadership from the CEO and leadership group across all company divisions is required during the rollout their supply chain projects and improvement programs.

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P19's firm incorporates strategic supply chain considerations into their corporate strategy including customer-focused and supplier-focused supply chain strategies, strategic supply chain performance objectives and supply chain configuration decisions regarding supply chain technology. Participant P19 explained that the corporate strategy is rolled out by the Board of Directors (BOD) by setting corporate objectives for the year, which are then "cascaded downwards through the CEO, COO [Chief Operating Officer] and senior management to all employees" (P19). Participant P19 outlined the rollout process as follows:

> CEO and his executive committee determine what each line of business needs to achieve to meet those objectives. Department Heads set line of business objectives. Next level down start determining which leaders need to do what. Goals are entered into the PDM [Performance Development and Measurement] system (P19).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P20's firm incorporates strategic supply chain considerations into their corporate strategy including customer-focused and supplier-focused supply chain strategies, strategic supply chain performance objectives, and supply chain configuration decisions regarding inventory, suppliers, supply chain data integration technology, supply chain network and manufacturing. Participant P20 explained that their corporate strategy is rolled out across their "functionally matrix" global organisation across streams that are functionally linked to each team in Australia, United States, and Ireland, "to make sure that the overarching objectives are being achieved and measured" (P20).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P27's firm incorporates strategic supply chain considerations into their corporate strategy including strategic supply chain opportunities and supply chain configuration decisions regarding enterprise-wide IT. Participant P27 explained that their corporate strategy is rolled out top-down and stated: "you'll have a roll-down from a corporate level, to a business unit level, to a corridor level, to a depot level" (P27) and then into individual role plans aligned with the strategy.

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle Management participant P30's firm incorporates strategic supply chain considerations into their corporate strategy including supplier-focused supply chain strategies regarding strategic spend, strategic supply chain performance objectives and supply chain configuration decisions regarding suppliers. Participant P30 explained that their firm's corporate strategy rollout is led by senior leadership who are required to bring the stakeholders on the journey to ensure strategic initiatives are achievable, supported, resourced, and rewarded:

> Bring the stakeholders on the journey- make it 'safe', 'no loss', meaningful, scalable, and achievable over time. […] Demonstrate the value senior leadership places on the initiative by supporting it, resourcing it, rewarding progress milestones (P30).

Table 4.7 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 5: Corporate strategy rollout*, using representative supporting data from the findings. Seizing and transforming capabilities were

discovered in the data. Sensing capabilities were not discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 5 is provided in Chapter 5.

Table 4.7: Summary of dynamic capabilities and microfoundations associated with *Theme 5: Corporate strategy rollout*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Seizing *seize opportunities*	Corporate strategy cascading via deployment Corporate strategy deployment with a strategic supply chain focus Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Stakeholder management (Sodhi 2015)	Building loyalty and commitment • Demonstrating leadership (Teece 2009)	• "In terms of a corporate strategy, the initial communication of it, to start the cascade through the business, there was a roadshow performance by our chief executive officer, a member of our executive management team" (P1) • the importance of active and vocal leadership from the CEO and leadership group across all company divisions is required during the rollout their supply chain projects and improvement programs (P17) • "Demonstrate the value senior leadership places on the initiative by supporting it, resourcing it, rewarding progress milestones" (P30)
		Building loyalty and commitment • Effectively communicating (Teece 2009) Communicating goals (Sprafke et al. 2012; Teece 2009)	• "At the time that the corporate strategy was devised, that was step one of the communication to get it out to the broader business" (P1) • agreed strategic objectives and values are communicated firm-wide "to ensure our entire eco system is subscribing to, adopting and holding ourselves to account for these" (P4) • they undertake a broad approach to communicate the corporate strategy "as part of a wider story that includes purpose, the wider framework, risks and mitigations, benefits for the business and the individual etc." (P9)
		Developing business plans, objectives, budgets, and metrics to deliver corporate strategy to seize opportunities Seizing opportunities while maintaining commitment of key stakeholders (Suddaby et al. 2019)	• after their Board and CEO establish the corporate strategy, the executive team then holds a three-day management strategy workshop each year to "derive and revisit the strategy objectives and determine successful, redundant and amendable objectives" (P4) • "An important tool in delivering the strategy through the business are the business plans including capital, operational budgets, productions, and sales volume plans. The strategic actions are built into these plans and together with external forecasts (e.g. margins, exchange rates etc.) are used to develop business performance metrics for the years covered by the plan"; involving their employees "in identification, adoption and achieving the metrics" and through their involvement they become informed on the strategy (P9) • the corporate strategy is rolled out with core competencies determined for each business area, then each department head develops metrics to ensure that the objectives of the department and the firm are met (P13) • During corporate strategy rollout: "Bring the stakeholders on the journey- make it 'safe', 'no loss', meaningful, scalable, and achievable over time" (P30) • Rollout of corporate strategy with a strategic supply chain focus (P1, P3, P4, P13, P15, P17, P19, P20, P22, P27, P30)
Transforming *transform, reconfigure, and manage threats*	Corporate strategy cascading via strategic alignment	Corporate strategy firm-wide alignment	• 14 participants provided insights regarding cascading and aligning corporate strategy firm-wide (P1, P3, P4, P7, P9, P13, P15, P17, P19, P20, P22, P27, P29, P30) • cascade corporate strategy throughout the firm and down to each employee (P1, P3, P4, P9, P19, P27) • their corporate strategy is cascaded from his senior management position to the entire management team per department as relevant, who then cascade it within each department to each employee as relevant (P3) • the rollout of the corporate strategy is through developing and rolling out business plans that align to the strategy (P4, P9, P22, P29)

4.2.2.2. *Theme 6: Strategic performance alignment*

Theme 6 was established from the question pertaining to alignment of performance to corporate strategy, to ensure that the firm performs as required within its strategic supply chains. All 30 participants provided perceptions and insights regarding corporate strategy deployment and alignment through corporate strategy rollout (Theme 5), strategic performance alignment (Theme 6) and/or by using strategic performance management system technology (Theme 7). This section addresses Theme 6. Twenty-nine participants provided perceptions and insights regarding strategic performance alignment including global, firm-wide and supply chain to corporate strategy alignment, including 11 at Senior Management job level (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10 and P11), 15 at Middle+ Management job level (P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23, P25, P26 and P27) and three at Middle Management job level (P28, P29 and P30). This included 18 participants from firms with a corporate strategy with a strategic supply chain focus. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 6: Strategic performance alignment* is provided.

Global strategic performance alignment. Five participants who work at firms that are part of global entities and provided insights regarding how their firms achieve global strategic performance alignment, including one Senior Management participant (P3) and four Middle+ Management participants (P13, P17, P19 and P20).

Senior Management participant P3 indicated that their firm achieves global strategic performance alignment through alignment of KPIs from their London head office in the United Kingdom to their Australian firm, using financial metrics including stock, cash, return on investment, margins, and revenue growth. Locally and internationally their firm uses the same financial KPIs that they monitor the most:

> In our business, certainly any KPIs that I have that are directly related to – and we're part of a listed organisation that's listed on the FTSE [Financial Times Stock Exchange], to fifty in the UK [United Kingdom]. So, there are certain financial metrics around things like stock, cash, return on investment, margins, and revenue growth that they expect us to achieve. They roll into my KPIs. […] we've got about eight fairly strong KPIs that the business uses both here and internationally, and they're the things

> we monitor the most, so they're a cross-section of, obviously, revenue, profit, operating margins, operating costs, working capital, stock levels (P3).

Middle+ Management participant P13 indicated that their firm achieves global strategic performance alignment between their Australia-based firm and their firm's head office in Germany "where enterprise performance and associated technologies are reviewed and then rolled out to the subsidiary's worldwide" (P13). Participant P13 explained that their global head office reviews and approves the supply chain performance metrics that are incorporated in their corporate strategy as part of the global firm's worldwide monitoring and alignment of supply chain performance metrics through 60 countries, which are required to improve year-on-year.

Middle+ Management participant P17 explained that their global firm which is headquartered in Scandinavia has a "very powerful social agenda" and 105 global locations (P17). Global strategic performance alignment is achieved through KPIs for sales and profits and participant P17 also emphasised that "profits and dividends are largely reinvested into research" (P17).

Middle+ Management participant P19's global firm is headquartered in Utah, United States and operates in 15 countries. Participant P19 indicated that their firm achieves global strategic performance alignment through goals that participant P19 sets for his global supply chain team. Participant P19 identifies which global region represents the best cost savings opportunity to reduce spend and slow-moving inventory, and identifies which global regions need to improve from over performing and under-performing:

> However, in relation to my global supply chain team. What I will determine when setting goals for the global team are: 1. Who (which region) has best opportunity to cut cost - largest spend, biggest suppliers, largest amount of non-contracted suppliers. 2. Which regions have too much slow-moving inventory and need to reduce it. 3. Which regions are over performing, which ones under performing and need to make change (P19).

Middle+ Management participant P20 explained that their global firm is headquartered in Ireland, operates in 34 countries, and is heavily focused on international sales growth, and heavily focused on the customer (P20). Participant P20 stated that their

firm has a "global ambition of accelerating our international growth" (P20). Their firm achieves global strategic performance alignment through KPIs pertaining to international revenue and sales growth, "fuel rates, customer service levels, drop sales and products supplied in specification" (P20).

Firm-wide and supply chain-corporate strategy strategic performance alignment. *Theme 5: Corporate strategy rollout* provided insights into how corporate strategy is rolled out at participant firms. In this section, 29 participants provide additional insights regarding how their firms achieve strategic performance alignment including 11 Senior Management participants (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10 and P11), and 15 Middle+ Management participants (P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23, P25, P26 and P27), and three Middle Management participants (P28, P29 and P30) including firm-wide alignment and supply chain to corporate strategy alignment.

Senior Management participant P1 explained that their firm also achieves firm-wide strategic performance alignment through a firm-wide performance scorecard with KPIs using their performance management system to link all their objectives and goals to the corporate strategy. Participant P1 explained that their firm uses KPIs pertaining to sales and business development, DIFOT (delivered in full on time), a range of metrics linked to profit and loss performance, and commercial performance including subcontractor margin, company asset margins (P1):

> In terms of alignment through the corporate strategy, when it comes to measuring the business KPI's, […] performance management system, where they go through, that's where all of our objectives and goals are linked to the corporate strategy. […] the sales and business development team targets […] operations are measured on traditional metrics such as DIFOT and then there's also a range of metrics that performance is measured on that link to the P [profit] and L [loss] performance, commercial performance of the business including subcontractor margin, company asset margins, you know all of the conventional metrics (P1).

Senior Management participant P1 explained that their firm is in the process of developing non-traditional balanced scorecards using four pillars including "people first, strong capability, safety always and sustainability" to link their balanced scorecard to measure performance (P1). Participant P1 emphasised that their focus is

not all about profit and loss like other corporate and for-profit environments, and that they do not use a traditional balanced scorecard but have developed their own non-traditional balanced scorecards based on pillars of the business which links with their corporate strategy:

> Yes so organisational performance – we are in the process of developing balanced scorecards […]. So our values or pillars for the business are people first, strong capability, safety always and sustainability, so they're the four quadrants that we're linking our balanced scorecard to measure performance, it's not all about P [profit] and L [loss] focus, as we know with today's corporate and for-profit environments, that the business is measured on various capitals and pillars. So it's not your traditional or conventional balanced scorecard quadrant if you like, but we're trying to align it to the pillars of the business, which again links in with our corporate strategy (P1).

Senior Management participant P3 explained that after their UK firm rolls out KPIs to their Australia-based firm and his senior management position, he then rolls these KPIs into all his management team's KPIs where relevant (for example, stock management KPIs roll into their operations manager's KPIs); his management team then cascade the KPIs throughout each of their departments to each employee's KPIs where relevant. Participant P3 indicated that firm-wide strategic performance alignment is also achieved through alignment of KPIs pertaining to financial metrics including stock levels, cash, return on investment, profit, operating margins, operating costs, revenue growth and working capital, in addition to new business development and cybersecurity. Participant P3 explained that their firm's KPIs are primarily focused on the financial performance of the overall business and stated:

> So, there are certain financial metrics around things like stock, cash, return on investment, margins, and revenue growth that they [global UK office] expect us to achieve. They roll into my KPIs. I then take those KPIs and roll them into all of our management KPIs where relevant. So, if it's around something like stock management, it will roll into the operations manager's KPIs. If it's around something like an IT strategy around, certainly at the moment cybersecurity is massive, so I roll that into our IT manager's KPIs, certainly things like margins, revenues, and new business development roll into our commercial KPIs. They then cascade into everyone else's KPIs within their departments where relevant (P3).

Senior Management participant P4 explained that firm-wide strategic performance alignment is also achieved by cascading KPIs top down from the CEO to the executive team, then from the executive team to senior leadership, throughout the business and down to each employee. To maintain alignment of objectives to the corporate strategy, participant P4 explained that "no performance measurement plans are constructed prior to the relevant manager having theirs in place by their manager" (P4):

> Considering the board and CEO strategy, the financial year budgets and metrics, performance measurement plans and KPIs are cascaded top down, CEO to exec, exec to senior leadership etc.. We have a requirement that no performance measurement plans are constructed prior to the relevant manager having theirs in place by their manager – this ensures we maintain the alignment of objectives to the corporate strategy (P4).

Senior Management participant P7 indicated that firm-wide strategic performance alignment is also achieved using their firm-wide performance scorecard. Eight participants stated that their firms use a firm-wide performance scorecard including three Senior Management participants (P1, P6 and P7), and four Middle+ Management participants (P22, P25, P26 and P27), and one Middle Management participant (P29).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Senior Management participant P5's firm incorporates strategic supply chain considerations into their corporate strategy including strategic supply chain performance objectives and supply chain configuration decisions regarding enterprise-wide IT, decision support systems and supply chain technology. Participant P5 indicated that strategic performance alignment at their firm is achieved through strategic supply chain performance objectives pertaining to efficient sourcing activity including transactional efficiencies, inventory supplier performance, contractor performance, supplier spend, inventory levels, maverick spend reduction and supply chain cost savings.

Senior Management participant P6 explained that their firm achieves firm-wide strategic performance alignment using a firm-wide performance scorecard that relates to the corporate strategy, with supply chain metrics including maintenance turnarounds, customer satisfaction levels, inventory type levels and DIFOTEF (delivered in full on time error free):

> Yes, we do have one. The performance scorecard relates to the corporate strategy, so what is in the corporate strategy should be reflected in what we're measuring. […] Where I am at the moment, maintenance turnarounds on […], customer satisfaction levels, inventory type levels. […] DIFOTEF (P6).

Senior Management participant P9 explained that their "corporate strategy is developed to enable the business to achieve the overarching metrics of total shareholder return (TSR) and return on capital employed (ROCE)" (P9), where ROCE is measured for the business units. As a result of developing business unit plans to deliver the strategy, participant P9 stated: "The business performance metrics have a hierarchy that breaks out the global metrics into component metrics to make them relevant for separate teams in the business units" (P9). Participant P9 explained that the business performance metrics "will generally be outcome based but can also include process metrics such as, % of actions implemented" (P9) and that "the same performance metrics end up as performance objectives for employees in the business" (P9). Participant P9 explained that this process ensures that "there is alignment between strategy and operational metrics that define outcomes to be delivered by the business" (P9).

Senior Management participant P10 explained that their firm achieves strategic performance alignment through alignment of measures to the corporate strategy. Participant P10 explained that their firm achieves alignment of short term and long term measures from the corporate strategy, to business units and to individual performance:

> Short term - yearly - three measures - overall company hits plan, individual business unit hits plan, individual performance. Long term - similar to above but measured over 3 years. All these measurements align with corporate strategy (P10).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Senior Management participant P11's firm incorporates strategic supply chain considerations into their corporate strategy including strategic supply chain opportunities, customer-focused and supplier-focused supply chain strategies, strategic supply chain performance objectives and supply chain configuration decisions regarding suppliers, supply chain technology, supply chain network and manufacturing. Participant P11 explained that strategic performance alignment is achieved by aligning business

divisions with the corporate strategy which commences during corporate strategy formulation. Participant P11 explained that strategic performance alignment is achieved through their strategic supply chain performance objectives including financial performance improvement targets, financial performance stretch targets, freight cost reduction, supply chain cost reduction, outsourcing freight to reduce costs, outsourcing manufacturing of products with high volume sales that are easy-to-make to reduce costs, product sales targets (supply chain revenue), activity cost identification (including cost of sales, returns, seconds, product design, services, setup, business units, service providers, manufacturing, call centre).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P12's firm incorporates strategic supply chain considerations into their corporate strategy including supply chain opportunities, customer-focused supply chain strategies, strategic supply chain performance objectives, and supply chain configuration decisions regarding supply chain network. Participant P12 explained that firm-wide strategic performance alignment is also achieved using a few overall KPIs that are clear across the firm and complement each other to ensure goal alignment and include perfect order and lead times:

> There are clear KPI's within the organisation that complement each other, the organisation tries to ensure that there is goal alignment and work to a few overall KPI's (P12).

Middle+ Management participant P13 indicated that firm-wide strategic performance alignment is also achieved through a firm-wide performance scorecard and through the development and alignment of department-level key performance metrics with the core competencies of the business area to meet department and business objectives. Participant P13 explained that the strategic objectives of the core competencies of the supply chain business area include minimising cost of logistics, warehousing and transport, ensuring high customer service levels, on time delivery and increased customer satisfaction, increased warehouse productivity and efficient warehouse processes and high employee motivation and increased employee qualifications:

> [Firm] has determined its core competencies for each area of the business then the head of each department develops the key performance metrics within their department to ensure the objectives of the department and the broader business are

> met. The core competencies for supply chain are DIFOT (Delivery in full and on time); Supply Chain Cost to Sales ratio; Months of [Inventory] Cover; [Inventory and Machine] Availability; Sick Leave ratio; Overtime; Error rate & Values/Hour (pick rate, lines, orders) (P13).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P14's firm incorporates strategic supply chain considerations into their corporate strategy including customer-focused supply chain strategies and strategic supply chain performance objectives. Participant P14 indicated that strategic performance alignment is achieved by having measurement criteria in place at all levels in their firm including board level.

Thirteen participants indicated that their firms achieve strategic performance alignment pertaining to supply chain costs, including four Senior Management participants (P3, P5, P8 and P11), and eight Middle+ Management participants (P13, P15, P18, P19, P20, P22, P23 and P25) and one Middle Management participant (P29). Middle+ Management participant P15 explained that firm-wide strategic performance alignment is also achieved by cascading performance objectives from the corporate strategy throughout the entire firm down to the employees, for both leading and lagging metrics. Participant P15 explained that a constant focus is applied from the Board down to drive improvement and a performance scorecard is used which covers safety, cost, people, sales volumes and prices and strategic objectives, in addition to supply chain performance objectives including conversion cost, transport cost and stock turns:

> [Firm] has set performance objectives as part of corporate strategy, for both leading and lagging metrics, and these are cascaded through the entire organisation, including down to individuals as part of performance plans. […] Improvement is driven by the constant focus from the Board down. We use a scorecard that includes; safety (broken down into detail), cost (broken down into detail), people metrics (leave balances, absenteeism, diversity, succession plans, etc), sales volumes and prices, progress against annual specific strategic objectives (P15).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P16's firm incorporates strategic supply chain considerations into their corporate strategy including strategic supply chain opportunities, supplier-

focused supply chain strategies and strategic supply chain performance objectives. Strategic performance alignment of supply chain performance at participant P16's firm is achieved with supply chain KPIs being included in their Board performance dashboard (P16).

Middle+ Management participant P17 explained that firm-wide strategic performance alignment is also achieved through supply chain KPIs pertaining to:

> DIFOT, quality of goods and returns policy, usage data report, variations to contract, implementation and maintenance of the NPC [National Product Catalogue], invoicing and pricing accuracy, and continuous improvement and innovation (P17).

Middle+ Management participant P19 indicated that firm-wide strategic performance alignment is also achieved through alignment of performance objectives pertaining to EBITDA (earnings before interest, taxes, depreciation, and amortisation), on time delivery performance and reduction of costs for product, inventory, raw materials, transport and logistics and headcount.

Middle+ Management participant P20 indicated that firm-wide strategic performance alignment is also achieved through KPIs pertaining to: international revenue and sales growth (to distributors and customers), drop sales, demand planning and forecast accuracy, right inventory in the market, products supplied in correct specification, customer service levels (meeting customer demand), working capital, fuel rates, controlling the supply chain longer by holding the title of goods, and product development and cost of capital (P20).

Middle+ Management participant P22 explained that firm-wide strategic performance alignment is also achieved using a firm-wide performance scorecard. Participant P22 explained that their firm rolls out supply chain KPIs top-down, which are deemed to be key lead and lag indicators for supply chain performance including: safety "the first one is always safety"; distribution centre capacity "it's quite crucial that we're managing the capacity of these sites"; inbound receiving "how long is it taking us to get product in from suppliers and process it to where we call it it's available to promise"; supply DIFOT "is always important" with a target of 99.8 percent, explaining that their team "live and die by that, delivered in full on time"; supply error rate "obviously another important one for us - deliver the wrong stuff at the wrong

time in the wrong quantities it's going to cause us rework or out of stocks"; aged stock; stock turn within the distribution centre "is obviously very important; 'sweating the asset' we've got, we don't want to build endless aisles of […] products going nowhere"; pick performance accuracy – short picks, missed picks "pick the wrong thing, not only do we have a very disappointed customer […] but it's all the industry working cost to rectify that error"; delivery performance including measuring deliveries after five o'clock, how many attempts, same day next day delivery percentage; Good Service Score "the other big one that we live and die by […] that's part of being really important to us over the last three years"; percent of sale cost – cost per line cost order; and cost to serve (P22).

Five participants including, Senior Management participant P2 and Middle+ Management participants P21, P23, P25 and P28, explained that their firms align the supply chain strategy to corporate strategy. Senior Management participant P2 indicated that their firm achieves strategic performance alignment through alignment of their strategic supply chain plan as an enabler for the wider corporate strategy. Middle+ Management participant P21 explained that their firm achieves strategic performance alignment by aligning their supply chain strategy with their overall business strategy and also stated: "key objectives are aligned to ensure that supply chain activities are prioritised and are in line to assist in delivering business outcomes" (P21). Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P23's firm incorporates strategic supply chain considerations into their corporate strategy including strategic and operational supply chain initiatives, strategic supply chain performance objectives and supply chain configuration decisions regarding enterprise-wide IT. Similarly, participant P23 stated that "it is very important to align the supply chain strategies with the corporate strategies" (P23) and that their firm achieves strategic performance alignment through KPIs pertaining to cost, quality, lead time, freight, and stock holding as they have a direct impact on corporate success:

> In simple terms, primary KPIs like cost, quality, lead time, freight, stock holding etc will have a direct impact on the corporate success (P23).

Data analysis pertaining to Research Issue 1 in Section 4.2.1, identified that Middle+ Management participant P25's firm incorporates strategic supply chain considerations

into their corporate strategy including supply chain strategies, supplier-focused supply chain strategies, strategic supply chain performance objectives and supply chain configuration decisions regarding suppliers and supply chain technology. Participant P25 explained that their firm also achieves strategic performance alignment using a firm-wide performance scorecard with performance objectives and key indicators for two key areas including commercial and technical, as well as scorecards for risk and financial:

> Yes, we do. The scorecard itself – it's simply just a number of objectives with performance requirements and there are 2 sections of it – one is commercial, one is technical and there's risk and there's financial as well and each is being assigned a scorecard. And there were a number of objectives on the key indicators that they need to meet (P25).

Participant P25 explained that their firm also aligns their supply chain strategy to their corporate strategy which commences during corporate strategy formulation. Their firm's strategic supply chain performance objectives pertain to top spend items, supply chain labour strategies, supplier and contractor performance, procure-to-pay cost savings and supply chain performance cost savings. Similarly, Middle+ Management participant P18 explained that their firm's supply chain performance objectives for their "corporate supply chain is to continually improve efficiency while reducing costs, this is often referred to as Efficient Customer Response or ECR" to align with "overarching corporate strategies and objectives" (P18).

Middle+ Management participant P26 indicated that their firm achieves firm-wide strategic performance alignment through a firm-wide performance scorecard. Participant P26 stated: "Our company […] develops products that is seen as market leading, price competitive and of high quality" (P26). Participant P26 provided a comprehensive description of their firm-wide performance scorecard which covers key areas including business performance by business unit, sales performance, sales management, profit margins, operations management, asset management, asset utilisation and supplier performance. Supply chain performance measures pertained to materials used, DIFOT, stock levels, product quality, overheads, returns, equipment on loan:

> Product quality and delivery performance is also measured through a number of service work that is required after sale. Robust measurement of Profitability, i.e. Accounting profits, Return on Investment is performed (P26).

Middle+ Management participant P27 explained that firm-wide strategic performance alignment is also achieved using very similar metrics across the business units which are broken down into the various components of the firm and driven down from corporate level to business unit level to corridor level to depot level and then to an individual level. Metrics that come out of their corporate strategy are incorporated into daily, weekly, monthly, yearly performance reporting (P27):

> there's a number of measures at a very top level, and then they're driven down through the organisation, so, very similar metrics across the businesses […] it's still using the same sort of metrics but just breaking them down into the various components of the organisation. […] Then equally, the metrics that come out of the strategy, they then find their way into daily, weekly, monthly, yearly performance reporting as well (P27).

Participant P27 explained that their firm uses a firm-wide performance scorecard at the "highest level" (P27). Their Chief Executive runs a monthly performance call with 60 leaders in the firm to present three metrics including safety performance, service delivery performance, and financial performance, which get rolled out further into the firm. Participant P27 emphasised that because there are only three metrics, it makes is easy to align them to the corporate strategy. Their firm previously used a batch of metrics that did not link back to the strategy but using three metrics is clean and brief at a top level and their staff can see that the metrics make sense to the strategy that has been articulated (P27):

> The Chief Executive runs a monthly performance call, and on that performance call he'll have, basically, just a one-pager that runs through our safety performance, our service delivery performance, and financial performance, and that goes to 60 odd leaders in the company. They're a monthly call, and then from there gets rolled out further. Yeah, I think it's pretty clean, because it's only those three metrics it makes it, actually pretty easy to align them to a strategy. I suppose, issues in the past have been where you'd have a whole batch of metrics that you can't make that link back. But the way we do it now is not too bad, and because it is fairly clean and fairly brief

> at a top level, then I think people can see the metrics make sense to the strategy that's been articulated (P27).

Middle+ Management participant P27 explained that because their firm operates two major business units, different types of performance are measured with slightly different metrics but are still aimed at providing a similar performance snapshot to align to a similar metric:

> because of the nature of the business, you're measuring different things, and the metrics are slightly different, so through using data in a leap sheet, you're able to give a similar sort of snapshot. The metrics we use in our […] business are different to our […] business, but they're similar. So, people at […] understand freight availability, and people at […] understand service delivery performance, but they're the basic measures of both, but the data, I guess is trying to roll that all up, and at least align into a similar sort of metric (P27).

Middle Management participant P28 indicated that their firm achieves strategic performance alignment through strategic supply chain performance objectives pertaining to inventory service levels, stock turns, inventory reduction, emergency inventory, inventory investment and supplier lead times in alignment with corporate strategy. Participant P28 explained that their firm manages the "trade-off between service levels and investment in inventory" in alignment with the firm's strategic cost objectives (P28).

Middle Management participant P29 indicated that strategic performance alignment is also achieved at their firm through setting key performance objectives in alignment with their corporate strategy's Key Result Areas. From this point, KPIs are cascaded down through business plans and then through the performance management plans of senior leaders which are aligned with targets in the business plans. Participant P29 explained that their firm also uses a firm-wide performance scorecard by way of inclusion in the business plans, referred to as a corporate scorecard: "The corporate scorecard is deployed by way of inclusion in business plans" (P29). Participant P29 outlined their firm's corporate scorecard, where key metrics span across seven categories including safety, finance, strategy, customer, people, compliance, and operations (P29). With safety first, their firm's metrics also measure net profit, expenditure, completion of strategic initiatives, customer establishment, leadership,

material non-compliance, program of work delivery and meeting of minimum service standards (P29).

Middle Management participant P30 explained that strategic performance alignment is also achieved at their firm using a firm-wide performance management framework. Participant P30 expressed that their firm has established a culture where "it is OK to measure performance" and use "meaningful […] reporting over time to achieve a mature state of performance reporting" which is led by senior leadership (P30).

Table 4.8 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 6: Strategic performance alignment*, using representative supporting data from the findings. Seizing and transforming capabilities were discovered in the data. Sensing capabilities were not discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 6 is provided in Chapter 5.

Table 4.8: Summary of dynamic capabilities and microfoundations associated with *Theme 6: Strategic performance alignment*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Seizing *seize opportunities*	Corporate strategy cascading via deployment Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) Metrics management (Hanson et al. 2011; Vijaya et al. 2019)	Translating strategic KPIs into operational metrics to guide actions (Conboy et al. 2020)	• UK firm rolls out KPIs to their Australia-based firm - "They roll into my KPIs. I then take those KPIs and roll them into all of our management KPIs where relevant. […] They then cascade into everyone else's KPIs within their departments where relevant" (P3) • "Considering the board and CEO strategy, the financial year budgets and metrics, performance measurement plans and KPIs are cascaded top down, CEO to exec, exec to senior leadership etc." (P4) • "The business performance metrics have a hierarchy that breaks out the global metrics into component metrics to make them relevant for separate teams in the business units" (P9) • "The corporate scorecard is deployed by way of inclusion in business plans" (P29) • "my global supply chain team. What I will determine when setting goals for the global team are: 1. Who (which region) has best opportunity to cut cost - largest spend, biggest suppliers, largest amount of non-contracted suppliers. 2. Which regions have too much slow-moving inventory and need to reduce it. 3. Which regions are over performing, which ones under performing and need to make change" (P19) • their firm's head office in Germany "where enterprise performance and associated technologies are reviewed and then rolled out to the subsidiary's worldwide" (P13)
		Changing enterprise procedures to seize opportunities (Teece 2009)	• "organisational performance – we are in the process of developing balanced scorecards […] So our values or pillars for the business are people first, strong capability, safety always and sustainability, so they're the four quadrants that we're linking our balanced scorecard to measure performance, it's not all about P [profit] and L [loss] focus, as we know with today's corporate and for-profit environments, that the business is measured on various capitals and pillars. So it's not your traditional or conventional balanced scorecard quadrant if you like, but we're trying to align it to the pillars of the business, which again links in with our corporate strategy" (P1)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
			• "because it's only those three metrics it makes it, actually pretty easy to align them to a strategy. I suppose, issues in the past have been where you'd have a whole batch of metrics that you can't make that link back. But the way we do it now is not too bad, and because it is fairly clean and fairly brief at a top level, then I think people can see the metrics make sense to the strategy that's been articulated" (P27)
		Governance (Teece 2009)	• their firm's corporate scorecard, where key metrics span across seven categories including safety, finance, strategy, customer, people, compliance, and operations (P29) • "no performance measurement plans are constructed prior to the relevant manager having theirs in place by their manager" (P4) • "chief executive runs a monthly performance call […] that goes to 60 odd leaders in the company. They're a monthly call, and then from there gets rolled out further (P27) • business performance metrics "will generally be outcome based […] the same performance metrics end up as performance objectives for employees in the business" (P9) • "performance scorecard relates to the corporate strategy" (P6)
Transforming *transform, reconfigure, and manage threats*	Corporate strategy cascading via strategic performance alignment	Strategic performance alignment of corporate strategy with a strategic supply chain focus Supply chain strategy alignment to corporate strategy	• five participants who work at firms that are part of global entities and provided insights regarding how their firms achieve global strategic performance alignment (P3, P13, P17, P19, P20) • achieves global strategic performance alignment through alignment of KPIs from their London head office in the United Kingdom to their Australian firm (P3) • global head office reviews and approves supply chain performance metrics as part of the global firm's worldwide monitoring and alignment of supply chain performance metrics through 60 countries, which are required to improve year-on-year (P13) • achieves global strategic performance alignment through setting goals for his global supply chain team (P19) • 29 participants provide additional insights regarding how their firms achieve strategic performance alignment including firm-wide and supply chain to corporate strategy alignment • firm-wide strategic performance alignment is also achieved using a firm-wide performance scorecard (P1, P6, P7, P22, P25, P26, P27, P29) • "There are clear KPI's within the organisation that complement each other, the organisation tries to ensure that there is goal alignment and work to a few overall KPI's" (P12) • strategic performance alignment is achieved through setting key performance objectives in alignment with their corporate strategy's Key Result Areas (P29) • strategic performance alignment of corporate strategy with a strategic supply chain focus (18 participants) • 13 participants indicated that their firms achieve strategic performance alignment pertaining to supply chain costs (P3, P5, P8, P11, P13, P15, P18, P19, P20, P22, P23, P25, P29) • aligns supply chain strategy to corporate strategy (P2, P21, P23, P25, P28)

4.2.2.3. *Theme 7: Strategic performance management system technology*

Theme 7 was established from the question pertaining to using performance management and measurement system technology to deploy and align with corporate strategy, to ensure that the firm performs as required within its strategic supply chains. All 30 participants provided perceptions and insights regarding corporate strategy deployment and alignment through corporate strategy rollout (Theme 5), strategic performance alignment (Theme 6) and/or by using strategic performance management system technology (Theme 7). This section addresses Theme 7.

Of the 30 participants, 22 participants provided perceptions and insights in relation to performance management and measurement system technology which enabled good representation in the analysis, including nine Senior Management participants (P1, P2, P3, P4, P5, P6, P7, P9 and P11), and 10 Middle+ Management participants (P13, P15, P19, P20, P22, P23, P24, P25, P26 and P27), and three Middle Management participants (P28, P29 and P30). This included 14 participants from firms with a corporate strategy with a strategic supply chain focus. In this section, the term strategic performance management system technology has been shortened to performance system technology for brevity. The participants' firms use performance system technology to link goals to corporate strategy, align people performance to corporate strategy, link budgeting to corporate strategy, facilitate strategy cascading, measure business KPIs, report firm performance and people performance, drive business improvement, and monitor product sales performance, supplier performance, targeted market segments and customers. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 7: Strategic performance management system technology* is provided.

Eight participants did not provide insights in relation to performance system technology in relation to corporate strategy deployment and alignment, which did not impact the analysis, including Senior Management participants P8 and P10, and Middle+ Management participants P12, P14, P16, P17, P18 and P21. Although, participant P14 did explain that their firm uses artificial intelligence technology "Llamasoft to run up to 1 million purchase orders through the program, generate an "As Is" and then run different scenarios" which allows their firm simulate different performance scenarios to improve supply chain performance. Middle+ Management participants P12 and P21 explained that technology is an enabler of supply chain performance. Middle+ Management participant P12 stated that "technology is an enabler to ensuring supply chain hits its targets including the perfect order" (P12). Middle+ Management participant P21 explained that "technology is one of the key enablers […] which will support supply chain performance objectives to ensure that overall business objectives are met" (P21).

Senior Management participant P1 explained that their firm's KPIs, "objectives and goals are linked to the corporate strategy" through the firm's performance management

system which also measures the firm's KPIs and people performance which is also aligned to the corporate strategy through role objectives and capability assessments in the system (P1). Participant P1 elaborated:

> So for the performance management and people management, the human resource system is ConnX, and that's where we go through our periodical performance reviews, and that's where we set the objectives, define the roadmaps and measure in a sense the individual performance is against that. The other human resource system that we've got in the business is PeopleStreme (P1).

Participant P1 explained that the Chief Information Officer at their firm is leading "a change management journey" with their "IT architecture to have a more integrated backend system" to support the measurement of their new non-traditional balanced scorecard from a central source (P1). Participant P1 explained that their firm relies on their "business intelligence tool to drive performance management" and the technology upgrade will allow their technology to "bring data in from various data warehouses or modules that make up part of the IT architecture" (P1). The technology upgrade will enable their firm to "efficiently and effectively pull data from various sources to provide a meaningful dashboard or populate that balanced scorecard" (P1). Participant P1 elaborated:

> So performance measurement technology, so it has been recognised as the need for improvement and that's the journey we're on at the moment, evidenced by this shift to Google, […] that is a big shift that we're going through at this point in time […] that's the journey we're currently undertaking at the moment to change that, because it has been recognised the importance of using or utilising technology to drive business improvement (P1).

The performance system technology at four participant's firms consist of business intelligence tools, including Senior Management participants P1, P2, P3 and P6, as represented by participants P1 (above), P3 and P6. Senior Management participant P3 explained that their distribution firm "by its very nature, is predominantly a sales-driven organisation" and that their business intelligence tool is used to monitor daily sales, supplier performance, sales reports and each area's sales contribution to overall performance (P3):

> so the sales process and monitoring, performance of our suppliers we represent in the market, the most critical thing we can manage, everyone in the business gets a daily sales report of their particular area, based on what their contribution is to that overall performance, and that's all done through our business intelligence tool, and without that tool, people wouldn't get that constant monitoring (P3).

Participant P3 explained that their firm's metrics are based upon "past performance and incremental improvement, which is a key strategy of the business" (P3). When considering metrics, their firm considers currency, type of supply mix and the impact on stockholdings "and the movement of working capital through the business" (P3). Participant P3 elaborated:

> So, once all those KPIs are established in the budgeting process, which is what we do, and that budgeting process is really linked to the corporate strategy, all of that stuff cascades through the business, using our business intelligence tools (P3).

Participant P3 explained that their firm, which has "been around for around fifty years", is evolving and changes each year and they use their business intelligence tool for constant monitoring (P3). They "monitor individual supplier performance" then set a budget in the business intelligence tool to monitor the budget in alignment with the strategy which they consider critically important (P3). Their firm monitors "the incremental improvement or lack of improvement in those areas, and then make further decisions strategically" on what suppliers and products they want to continue and monitor product lifecycle and market opportunity (P3). For products with declining product technology, their firm will "bring in a new supplier and try and recoup and grow a business sector that's got a newer technology" (P3). Participant P3 stated: "Monitoring and the execution and everything is very much driven by the metrics around that business intelligence metrics that we use" (P3). On addressing technology issues, participant P3 explained that "there was a big amount of investment" in the business intelligence tool and the "biggest frustration" is that their firm has "got to constantly be investing in these packages" to maintain the software levels (P3). While their firm has "some capability" to use their business intelligence tool, their firm's other frustration is the need for a "dedicated data analyst or person that, actually just does business intelligence" with end to end supply chain capability (P3). Participant P3 explained that their firm has recognised that "a lot of the expertise resides with a

few people, so again, constantly training people", a lot of money is spent on implementing and setting up the tool and a lot of time is invested in getting the best use out of the tool (P3).

Performance system technology used by the firms of 12 participants include ERP systems, including three Senior Management participants (P5, P6 and P7) and eight Middle+ Management participants (P13, P15, P19, P20, P23, P24, P25 and P26), and one Middle Management participant (P29), as represented by participants P5, P6, P15, P19 and P29. Senior Management participant P5 emphasised the importance of ensuring "data and data governance is of the highest standard" (P5). Their firm uses their ERP system to measure performance, share information across the firm and with suppliers, monitor contractor performance and monitor spend. Participant P5 elaborated:

> we get real-time information about what's happening with, transactionally with our customers, including delivery of goods to our warehouses, and so forth. So, it's an important part of getting better at managing and lowering our inventory levels where we possibly can through that real-time information (P5).

Senior Management participant P6 explained that technology "definitely" plays a role in cascading and rolling out corporate strategy at their firm and that their firm uses "Ariba for upstream and SAP for downstream, including a maintenance module" and business intelligent tools for reporting, analysis and insights (P6). Participant P6 elaborated:

> If I could look where I am at the moment, there's a lot of effort going into analysis, reporting insights and data, so it's not just analytics, you've got to get the insights from the analysis, and then actions out of that. So, systems like, SAP's BI [business intelligence] or reporting shells are becoming critical for how we do business. There are a number of systems which take data and then present it. Tableau is the reporting system we're using where I am at the moment. Tableau is like a shell which sits over the data, that you can manipulate the data to present it in, however you want to present it (P6).

Participant P6 explained that at their firm there is "an increasing rise of data and insights teams or knowledge teams whose function is" to identify what needs to be reported, where to get the data, how to present it, what are the insights, and what are

the actions they are asking their staff to take from the insights (P6). Technology is a "rapidly developing area" and how their firm analyses and gains insights from their data is "changing fairly rapidly over time" according to participant P6. Participant P6 explained that their firm's performance system technology includes a visual management system which enables alignment of performance measurement to the corporate strategy:

> Where I'm at, at the moment, has a visual management system. So, each of the divisions and the directorates has their, what we call VMCs [visual management cells], which electronically link up to an organisation 'war room' if you like, which has got a consolidated visual management set-up. So, there is an electronic link which goes through to that, and that's where the alignment of what we're measuring to corporate strategy comes into play (P6).

Middle+ Management participant P15 confirmed that technology plays a role in cascading and rolling out corporate strategy at their firm and that it "is essential for the monitoring of and reporting on the objectives" (P15). Participant P15 explained that their firm's corporate strategy "objectives are monitored and measured daily, weekly, monthly, 6 monthly and annually" (P15). Participant P15 emphasised the importance of fully utilising technology capability and "having and applying discipline in the application of technology" and provided an example, explaining that their firm is "very good at managing safety, with a constant and consistent focus in this area" (P15). Participant P15 elaborated: "All our technology systems related to safety are fully utilised because of the habits we have developed to routinely make use of them to drive improvement" (P15). Interestingly, participant P15 explained that their firm "has been faced with significant complexity and directly-related cost issues" regarding the development of their business systems that measure performance, largely driven out of their ERP platforms (P15). Participant P15 explained that their firm is in the process of replacing several major ERP systems and stated:

> Upgrading these fundamental systems is hugely costly and enormously complex and disruptive. For these reasons we have been incentivised for many years to persevere with legacy systems, a situation which breeds additional complexity as disparate tools and applications are bolted on with the intention of providing new and valuable capability (P15).

Participant P15 explained “there is a trend toward more real time data collection and reporting as well as data analytics based on significantly more data, including more real time data”. Participant P15 explained that their firm is seeking technology that provides “visibility of business performance along the entire supply chain and enables deep diving into specific areas as required” (P15). Similarly, Middle+ Management participant P24 also explained that their firm has identified the need to upgrade their ERP system to cope with their firm’s exponential growth.

Middle+ Management participant P19 confirmed that technology plays a role in cascading and rolling out corporate strategy and that their firm uses the Oracle ERP system which includes an online performance development and measurement system. Participant P19 explained that as part of their firm’s top-down corporate strategy cascade, individuals’ goals are then entered into the system including goals for personal and professional development and for meeting business expectations. Participant P19 emphasised that their firm has very strict expectations on their on-line training systems and “completion of allocated on-line training on time is also a performance measurement goal” (P19). Participant P19 explained that their firm has “had no performance issues with the system itself as such, but in the early days when first implemented it was overly complex” (P19). Participant P19 elaborated that their firm’s previous system “required far too much information and was difficult to navigate” and that in “subsequent years it has been significantly simplified” (P19).

Middle Management participant P29 confirmed that technology plays a role in cascading and rolling out corporate strategy at their firm and stated:

> Technology is pivotal to the effectiveness of the cascade with adopting SAP Success Factors as its primary tool performance management platform. Individual leaders can select preloaded metrics for direct cascading or define individual objectives for roles where a direct cascade would not be appropriate (P29).

Senior Management participant P4 explained that their firm uses “extremely effective technologies and systems to facilitate effective strategy cascading” including “various forms of processes to enable leadership to keep focused on the broader strategic objectives” (P4). Participant P4 explained that their firm uses a CRM (customer relationship management) system to “ensure targeted market segments, customers and product users remain key priorities” (P4). Their firm is also installing a video

conferencing system to enable the firm to "move from regular teleconference discussions to video call discussions, increasing impact and attention to strategic objective progress" (P4). To mitigate administration required to complete their performance measurement process, participant P4 explained that their firm is "assessing automated performance measurement systems" (P4). Participant P4 summarised their firm's strategic performance management system as follows, which also reflects responses provided by many of the participants:

> the top down approach, one up KPI objective reviews, regular periodic reviews and interventions, utilisation of technology and constant leadership development, collectively ensure the entire organisation maintains a vigilant focus on performance and activities which directly contribute to the overall corporate strategy (P4).

Senior Management participant P11's firm also use a CRM system to monitor customer performance and use their technology system to monitor inventory performance, freight performance, sales performance, service delivery performance, and share and transfer data with suppliers and customers. Participant P11 explained that their firm reviews performance almost daily and "publish the corporate strategy once a year" (P11).

Senior Management participant P9 confirmed that technology plays a role in cascading and rolling out corporate strategy at their firm "as the systems on which cascading strategy and metric selection depend is heavily influenced by technology" (P9). Participant P9 explained that separate segments of their firm have been developed and have come together over time and there has been "different pathways that has seen differing cultures, work practices and systems evolve". Participant P9 explained that this caused the measurement of metrics to differ across the business, including "definitions of metrics, the language used and the forms of presenting metrics". Their firm's systems and technology limited the type of information that could be directly measured, and their firm recognised the "impacts on the frequency of measurement, the timeliness of availability, the ability to sort, analyse and conclude from the metrics and to communicate information" (P9). Participant P9 explained that as new technology has been introduced in their firm, these limitations are reducing and improving the alignment of metrics across the firm. Participant P9 explained that their firm has overcome challenges including:

> prioritisation of making the change, the need to revise operating models as new technologies are introduced and the requirement for a massive change management exercise to ensure the benefits are actually gained (P9).

Participant P9 explained that the metrics within their firm's business performance objectives have weightings and that their "performance measurement system needs to be able to manage these varied forms of metric employed" (P9). Participant P9 also explained:

> During the year the performance measurement system tracks the results being achieved for the metrics built into the business plans. This becomes one input to the performance management system, both at a business and individual level (P9).

Middle+ Management participant P22 confirmed that technology plays a role in cascading and rolling out corporate strategy at their firm and stated that during the cascade:

> with technology it's kind of a back and forth of the way of the corporate plan, that becomes a business unit plan, that becomes the operating plan for the individual divisions (P22).

Participant P22 explained that the corporate strategy cascade is "always going to be done in combination with the human element" and elaborated that "there's no substitute for a manager sitting down with a team member and getting them to understand their role and the grander plan" (P22). Middle+ Management participant P28 explained that their firm's performance measurement system is "used to provide feedback on actions taken and to determine if objectives are being met" and is "critical in monitoring how the organisation is performing and whether it is in fact aligned to its strategy" (P28). Middle+ Management participant P30 confirmed that technology plays a role in cascading and rolling out corporate strategy at their firm and stated that "key data sets need to be identified in consultation with specialists and the business" (P30). Participant P30 explained that the key data sets need to be "agreed at the senior leader level regarding their specific value-add to long term strategy development and performance reporting" (P30). Participant P30 emphasised the importance of working "with willing divisional leaders who are willing to champion the initiative" (P30).

Middle+ Management participant P27 confirmed that technology plays a role in cascading and rolling out corporate strategy at their firm and 'certainly' helps with metrics for "daily, weekly, monthly, yearly performance reporting" using metrics from the corporate strategy (P27). Interestingly their firm has identified that their performance system technology is not able to measure some of the metrics they would like to use. Participant P27 explained that their firm is working on emerging technology and instrumentation on mobile assets to enhance data capture and performance measurement in alignment with corporate strategy. Their firm is:

> continuing to get better business systems that support the various functions of the business, whether it's operational planning, planning and delivery, or maintenance planning and execution, so all of those different functions are looking to update our systems to make things a lot easier, a lot quicker and tell us a lot quicker how we're going (P27).

Over the years their firm has undergone several changes to their management systems to increase the speed of data capture for decision making. Participant P27 elaborated that the systems that their firm has had in the past, did not align and capture the data they needed which required their firm to update their management systems to get the data a lot quicker to make decisions:

> the point is that the systems we've had in the past didn't align, and it was very difficult to get a genuine performance management system in place, because essentially, it wasn't capturing the data or the information that we needed; which led us to looking to update all of those management systems so that we can get data a lot quicker, and data that you're going to be able to use for the purpose of providing information that we can make decisions about (P27).

Table 4.9 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 7: Strategic performance management system technology*, using representative supporting data from the findings. Sensing, seizing, and transforming capabilities were discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 7 is provided in Chapter 5.

Table 4.9: Summary of dynamic capabilities and microfoundations associated with *Theme 7: Strategic performance management system technology*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Sensing *sense and shape opportunities and threats*	Firm and supply chain performance monitoring and reporting Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019)	Monitoring internal developments (Sprafke et al. 2012)	• their business intelligence tool is used to monitor daily sales, supplier performance, sales reports and each area's sales contribution to overall performance (P3) • their firm uses their ERP system to measure performance, share information across the firm and with suppliers, monitor contractor performance and monitor spend (P5) • performance measurement system tracks the results being achieved for the metrics built into the business plans (P9). • "analysis, reporting insights and data, so it's not just analytics, you've got to get the insights from the analysis, and then actions out of that" (P6)
		Technology scanning • Technological developments (Khan et al. 2020)	• their firm is "assessing automated performance measurement systems" (P4) • "there is a trend toward more real time data collection and reporting as well as data analytics based on significantly more data, including more real time data" (P15); seeking technology that provides "visibility of business performance along the entire supply chain and enables deep diving into specific areas as required" (P15) • "looking to update our systems to make things a lot easier, a lot quicker and tell us a lot quicker how we're going" (P27)
Seizing *seize opportunities*	Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Stakeholder management (Sodhi 2015) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Building loyalty and commitment • Effectively communicating (Teece 2009)	• the corporate strategy cascade is "always going to be done in combination with the human element" and elaborated that "there's no substitute for a manager sitting down with a team member and getting them to understand their role and the grander plan" (P22) • "everyone in the business gets a daily sales report of their particular area, based on what their contribution is to that overall performance" (P3) • installing a video conferencing system to enable the firm to "move from regular teleconference discussions to video call discussions, increasing impact and attention to strategic objective progress" (P4)
		Seizing opportunities by mobilising significant financial resources (Suddaby et al. 2019)	• "there was a big amount of investment" in the business intelligence tool and the "biggest frustration" is that their firm has "got to constantly be investing in these packages" to maintain the software levels (P3) • replacing several major ERP systems and stated: "Upgrading these fundamental systems is hugely costly and enormously complex and disruptive" (P15)
Transforming *transform, reconfigure, and manage threats*	Corporate strategy cascading via strategic performance management system technology Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019)	Corporate strategy alignment using performance system technology	• their firm's KPIs, "objectives and goals are linked to the corporate strategy" through the firm's performance management system which also measures the firm's KPIs and people performance which is also aligned to the corporate strategy through role objectives and capability assessments in the system (P1) • "budgeting process is really linked to the corporate strategy, all of that stuff cascades through the business, using our business intelligence tools" (P3) • technology "definitely" plays a role in cascading and rolling out corporate strategy at their firm (P6); "electronic link which goes through to that, and that's where the alignment of what we're measuring to corporate strategy comes into play" (P6) • "Technology is pivotal to the effectiveness of the cascade with adopting SAP Success Factors as its primary tool performance management platform. Individual leaders can select preloaded metrics for direct cascading or define individual objectives for roles where a direct cascade would not be appropriate" (P29)
		Technological upgradation (Khan et al. 2020) Improving strategic performance management through	• the technology upgrade will allow their technology to "bring data in from various data warehouses or modules that make up part of the IT architecture" (P1). The upgrade will enable their firm to "efficiently and effectively pull data from various sources to provide a meaningful dashboard, or populate that balanced scorecard" (P1) • upgrading ERP systems (P15)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
	Training and development (Azadegan et al. 2008; Vijaya et al. 2019) Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007)	upgrading performance system technology	• "which led us to looking to update all of those management systems so that we can get data a lot quicker, and data that you're going to be able to use for the purpose of providing information that we can make decisions about" (P27) • as new technology has been introduced in their firm, these limitations are reducing and improving the alignment of metrics across the firm (P9)
		Knowledge integration • Training of employees (Khan et al. 2020) Knowledge management • Learning (Teece 2009) Reconfiguring capabilities to cope with technology change (Kareem & Alameer 2019; Khan et al. 2020; Suddaby et al. 2019; Teece 2009)	• fully utilising technology capability and "having and applying discipline in the application of technology" (P15). • their firm has recognised that "a lot of the expertise resides with a few people, so again, constantly training people" (P3) • "constant leadership development" (P4) • their firm has very strict expectations on their on-line training systems and "completion of allocated on-line training on time is also a performance measurement goal" (P19) • Chief Information Officer leading "a change management journey" with their "IT architecture to have a more integrated backend system" to address a current technology challenge to support the measurement of their new balanced scorecard from a central source (P1) • as new technologies are introduced and the requirement for a massive change management exercise to ensure the benefits are actually gained (P9)

4.2.2.4. *Theme 8: Cross-functional relationships and alignment*

Theme 8 was established from the question pertaining to mastering infra-firm cross-functional relationship management, to ensure that the firm performs as required within its strategic supply chains. Of the 30 participants, 21 participants provided perceptions and insights in relation to cross-functional relationships which enabled good representation in the analysis, including six Senior Management participants (P1, P3, P5, P6, P7 and P11), and 13 Middle+ Management participants (P12, P13, P14, P15, P16, P17, P18, P19, P20, P22, P24, P25 and P27), and two Middle Management participants (P28 and P30). At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 8: Cross-functional relationships and alignment* is provided. Nine participants did not provide insights in relation to cross-functional relationships which did not impact the analysis, including five Senior Management participants (P2, P4, P8, P9 and P10), three Middle+ Management participants (P21, P23 and P26), and one Middle Management participant (P29).

There was a consensus amongst most of the participants that infra-firm cross-functional relationship management is mastered through leadership, collaboration, common goals, access to common information and identifying and engaging stakeholders. In contrast, two participants indicated that their firms need to improve

intra-firm cross-functional relationship management including Middle+ Management participant P24 and Middle Management participant P30. Participant P30 explained that "cross-functional relationships are always a bit tricky - many competing objectives and many not overtly shared" (P30). To improve intra-firm cross-functional relationships, participant P30 explained that their firm is focusing on improving collaboration, co-design and working jointly. Middle+ Management participant P24 indicated that despite their firm achieving rapid exponential growth over a short period of time, collaboration improvement is required across the business to leverage spend. Participant P24 indicated that the cause of the lack of collaboration and focus on leveraging spend has been overshadowed by their executive team closely following the market prices for the product they sell. Participant P24 explained: "The growth of the business has taken the corporate team by surprise and surpassed all expectations" (P24).

Nine participants indicated that their firms align cross-functional teams with senior management during corporate strategy formulation, where supply chain teams, and sales and marketing teams, operations teams, strategy managers and procurement teams, collaborate with senior management, including through strategic planning workshops (Senior Management participant P11, Middle+ Management participants P12, P13, P14, P16, P22, P25 and P27, and Middle Management participant P30). Evidence of these insights pertaining to alignment of cross-functional teams with senior management and collaboration during corporate strategy formulation is provided throughout Research Issue 1 in Section 4.2.1. This cross-functional strategic alignment during corporate strategy formulation enabled: the incorporation of strategic supply chain opportunities to drive business growth (P11, P12, P16, P25); the determination of strategic supply chain objectives to meet the business needs (P13, P22); alignment between corporate strategy and supply chain strategy (P12, P25); expert insights into the markets, supply chains and macroeconomic issues (P27); the planning of strategic spend solutions (P30); and the incorporation of strategic supply chain performance objectives (P14). The duration of this cross-functional collaboration during corporate strategy formulation can last for three or four months each year as identified by Senior Management participant P11 and Middle+ Management participant P22.

Other examples of cross-functional collaboration with senior management was also provided by Senior Management participants P3 and P7. Participant P3 refers to their firm's cross-functional relationship management approach as their management system, "where the business is, essentially broken across three areas: operations, IT, and finance", in addition to "health and safety, quality and regulatory, complaints management" (P3). Participant P3 explained that their management system allows their cross-functional teams to examine how the firm is servicing customers and suppliers, stating: "We look at how we're servicing our customers here in Australia and New Zealand, so our end-user customers. And we look at how we're servicing our suppliers" (P3). Their cross-functional teams achieve alignment across the firm in addition to alignment with and involvement of senior executive, while focusing on meeting the needs of their customer and supplier key stakeholders. Participant P3 emphasised: "What I made sure is that the senior executive is on all of those management groups, and we meet monthly" (P3):

> So, we have a very basic agenda, which we stick to, and we monitor and we talk about these types of things, and we have an agenda that's really, specifically focused on meeting the needs of those key stakeholders. So, that's how we cross-functionalise (P3).

Senior Management participant P7 explained that their firm has mastered intra-firm cross-functional relationship management to achieve firm performance objectives using "good leadership" to "ensure that there's a good culture and a good set of values and behaviours" and "principles under which everybody in the business is expected to operate" (P7). On managing cross-functional processes to achieve the firm's performance objectives, participant P7 explained that it is a "leadership matter, from a top down perspective, and again, maintaining values and behaviours and principles that are consistent with where the business wants to go" (P7). Participant P7 emphasised the importance of the strength of leadership, values, behaviours, and principles and added: "then a dissemination of leadership and expectation and clear accountability down through the cascading levels of the business" (P7). Participant P7 stated: "where the peer group doesn't accept poor values and behaviours because it's supported by a strength of leadership, you will find a far more effective intra-organisational level of integration" (P7).

There was a consensus across four participants regarding the need to apply a key focus on stakeholders within cross-functional teams using various strategies to manage relationships, including Senior Management participant P3 and Middle+ Management participants P18, P22 and P25. As identified above, participant P3 explained that the focus of their firms' cross-functional teams is to meet the needs of key stakeholders. Participant P18 explained that their firm appoint suitable project sponsors to "ensure that stakeholders work together in order to achieve set outcomes in an efficient, cost effective and timely manner" and that their firm's supply chain practitioners "ensure that all departmental stakeholders interests are being considered and met" (P18). Participant P22 explained that their firm apply a key focus on stakeholder identification and engagement by applying project management methodology to manage cross-functional processes to ensure that "a diverse range of stakeholders" are involved since no one person "knows all the processes and systems within a business" (P22). Participant P25 explained that their firm assign and embed champions into cross-functional teams on site to manage stakeholder relationships so that stakeholders on site have at least one person (the champion) that "really understand about one operation site or plant" (P25). Further perceptions from participant P18, P22, P25 and P30 are provided in the analyses below.

Middle+ Management participant P22 explained that their firm has mastered intra-firm cross-functional relationship management to achieve firm performance objectives through strong collaboration, connectivity and everyone understanding what the firm is aiming to achieve:

> we're quite lucky that we do have a fairly good intra firm culture […] So mastering the basics, it's good strong collaboration, connectivity, everyone probably understanding what the ultimate game is, back to strategy, because everyone understands what we're shooting for (P22).

Participant P22 comprehensively emphasised that their firm's intra-firm relationships are based on a 'give and take' culture that is driven by the leadership team for general managers. Their firm's intra-firm relationships are focused on "what's best for the business" because as a group of people they are "highly engaged in this business unit about what is the end goal of strategy" (P22). Participant P22 provided a 'give and take' example:

> There is some give and take in terms of well I'll spend some more money in supply chain if that gives you better service and that ultimately brings more customers in (P22).

Participant P22 cautioned: “But you can only get that if everyone understands what the end goal is and we’re all shooting towards it” (P22). A top-down approach at participant P22’s firm is key to driving the ‘give and take’ culture. Their firm’s Chief Financial Officer is good at “bringing that together and bringing the various GM's and leadership teams together to get them to understand and to be pretty rational about that” (P22):

> Now we're highly aligned and what their strategy goal is. […] And again when you cascade that culture down from GM down into leadership team, leadership team to managers, managers to teams, we tend to get it right (P22).

Interestingly, participant P22 pointed out that stakeholder engagement is a key component of their cross-functional processes using project management methodologies and by embedding project managers in each function:

> it’s something that is heavily promoted in our business that the project management methodologies we use must have that stakeholder engagement component in it. We've invested in having project managers in each of the functions. Any project I've been involved in has always had a component of stakeholder identification and stakeholder engagement. I've just sat in one this morning where we went through the project plan and we went in through and identified all stakeholders: *I need the head of demand planning, I need the buyer for this product, I need I.T. representation, operations representation, we better get the retail guys in and the eCom (eCommerce) girl in; customer experience need to be in on this.* And we'll bring that cross-functional team together (P22).

Participant P22 cautioned that due to many complicated IT process threads that they have learned that they need to have a collective group of people involved:

> no one knows all the processes and systems within a business, so you've got to bring in a diverse range of stakeholders to try and cover off all those. And it's just good courtesy to let people know what's going on in the business that might impact their area. So again we try to play well with each other and make sure that stakeholder engagement is always there (P22).

As identified above, Middle+ Management participant P25 explained that their firm has mastered intra-firm cross-functional relationship management to achieve firm performance objectives by assigning and embedding champions into teams on site to manage stakeholder relationships. Participant P25 cautioned: "it can get really difficult when you have multiple procurement personnel going to site and try to work with different stakeholders and that really confuses them" (P25). To implement their firm's supply chain strategy and category management strategy, their firm applies a category to each site and operations and then assigns a champion. Participant P25 elaborated:

> and that's not necessarily saying only that particular person can be the only person that deals with that site. It's just saying that a particular person is going to have a general knowledge about what's going on at this site. When it comes to very specialised areas, you still have a pedigree person (P25).

Participant P25 confirmed that "by having the site champions" their firm has at least one person that "really understand about one operation site or plant" and that this 'champion' method is applied across other cross-functional teams. Participant P25 explained that this method has really helped to establish relationships with their firm's site general managers, operational managers, plant managers and operational teams. Interestingly, participant P25 also explained a reciprocal benefit where the champions come back to their department and share knowledge, insights, and findings which helps to connect their departments' strategy in relation to the corporate strategy and to site planning, which improves procurement forecasting and link, contracting outcomes with site objectives and plans:

> During the supply chain team meetings, those champions at each site – they can share their knowledge, they can share the insight, they can share the finding and it helps connecting our departments strategy around – not just on the high business strategy, but also to the site planning as well. So, we can better connect our forecasting on the stuff that we need to procure to site requirements. A lot of time you confuse people on site as well because when they have something, they don't know who to go to in supply chain. And by doing so, they maintain that relationship with all the senior stakeholders, all the junior stakeholder operationally. Quite often in the key finding, we are able to link our contracting outcome along with the site objective and planning (P25).

On managing cross-functional processes and relationships, participant P25 explained that their firm has monthly supply chain meetings and invite each of the departments including asset management, finance, operations from site, technical managers, and specialists. When required they invite cross-functional team members to participate in supply chain meetings over one to two days. Participant P25 explained that these meetings allow cross-functional team members to contribute and that "it's a great way to build relationships and understand what other functions of the business are doing" (P25).

Senior Management participant P6 explained that their firm has mastered intra-firm cross-functional relationship management to achieve firm performance objectives "collaboratively" (P6). Participant P6 explained that functionally, supply chain is a support area in their firm which needs to:

> understand the objectives and the drivers, and the people and the relationships for the business units, and then play to that in cross-functional work to make sure that they're viewed as helping those business units and meet their objectives (P6).

Participant P6 explained that when looking at their firm's end to end supply chain in a procurement vertical, strategic sourcing is "run as a cross-functional process, with cross-functional teams involved in major projects" and projects are "tailored very specifically to the business strategy" (P6). Similarly, Middle+ Management participant P17 explained that cross-functional teams are established to implement their firm's "supply chain projects and improvement programs" that were incorporated in their corporate strategy (P17), stating that: "interactions that follow allow understanding and respect of each member's contribution" (P17). Middle+ Management participant P19 explained that the supply chain function in their firm, cross-functionally supports operations and services teams to achieve their performance targets. Participant P19 stated that "supply chain must be and are at the table with operational management at all times" (P19). Upon identifying the business objectives of their firm's services team, participant P19 explained that the "supply chain objective will then be tailored to help their [internal] customers achieve those targets" (P19).

There was a consensus across four Middle+ Management participants P15, P18, P19 and P27 regarding using common objectives, shared goals, and common access to

functions and information to master intra-firm cross-functional relationship management. Middle+ Management participant P15 explained that their firm has mastered intra-firm cross-functional relationship management to achieve firm performance objectives through "departmental and divisional business plans developed from a common set of high-level objectives" (P15). Participant P15 explained that the plans and objectives being "properly interconnected is necessary to ensure alignment" (P15). Regarding how cross-functional processes are managed at their firm, the participant P15 explained that the "business processes that monitor and actively manage alignment between parts of the business" support the business plans and objectives (P15). Similarly, Middle+ Management participant P19 also explained that their firm has mastered intra-firm cross-functional relationship management to achieve firm performance objectives through "shared goals" (P19). Participant P19 explained that goals and performance objectives are shared cross-functionally, with direct reporting to the Global Chief Operating Officer:

> I have shared [global supply chain] goals with all my operational and maintenance counterparts. We all share objectives of cost reduction, meeting EBITDA numbers and inventory reduction, that we report on monthly. We also all report directly up to the Global COO [Chief Operating Officer] (P19).

Middle+ Management participant P27 explained that their firm has mastered intra-firm cross-functional relationship management to achieve firm performance objectives by "having common access to the various functions and business units within a company" (P27). Participant P27 elaborated:

> so again, that when you are reviewing performance and making decisions, that you're all coming from the same baseline and have access to the same information so that you can have those open, transparent conversations (P27).

Participant P27 indicated a benefit of intra-firm cross-functional relationships as opposed to cross-firm, stating: "though with the intra-firm, clearly you're not sharing information to external parties" (P27). Similarly, Middle Management participant P28 explained that their firm has mastered intra-firm cross-functional relationship management to achieve firm performance objectives through cross-functional processes including the sales and operational planning process. Their firm's sales and operational planning process involves "marketing, sales, supply chain and finance to

sign off and agree the operating plan for critical inventory decisions" (P28). Participant P28 explained that "the involvement of all the functions drives a balanced result that can be aligned with the corporate objectives" (P28). Participant P28 pointed out that the cross-functional sales and operational planning process prevents each function from pushing their own objectives and working in silos. Participant P28 explained that "supply chain are trying to reduce inventory and hit their stock turn targets" (P28), however sales want to hold more fast selling items since marketing are pushing product sales, while "finance need to ensure that the organisation's cash flow targets are met" (P28). Participant P28 emphasised that "the balancing of these competing objectives drives the best result" which can be achieved through the cross-functional process by working together (P28).

Similarly, regarding addressing silos, Middle+ Management participant P18 explained that their firm: "effective intra firm cross functional management has been seen as an increasingly important discipline to assist in achieving corporate objectives in a timely and cost-effective manner" (P18). Participant P18 emphasised:

> Key to success is to foster an environment of silo reduction thereby ensuring that all participants of a cross functional team are cooperating to ensure achievement of common goals and targets. The appointment of suitable project sponsors is paramount as they will possess the skills to ensure that stakeholders work together in order to achieve set outcomes in an efficient, cost effective and timely manner (P18).

Participant P18 explained that their firm manages cross functional relationships "by choosing top performing individuals who are capable of removing interdepartmental barriers to ensure that tasks and projects are managed in an efficient and timely manner" (P18). Their firm's cross-functional teams "typically consist of the sponsor and project managers working within the lead department along with input from subject matter experts (SME's) from other functions within the organisation" including supply chain, sales, marketing, merchandise, and finance (P18). Participant P18 emphasised: "At all times the overall best interests of the entire organisation must remain as the key objective" (P18).

Middle+ Management participant P20 explained that their firm has mastered intra-firm cross-functional relationship management to achieve firm performance objectives by

establishing global cross functional streams that are functionally matrixed across three countries who collaborate to achieve and measure overarching objectives:

> Like most global entities we've got regional structures and regional teams; both commercial and key cross functional streams in Quality, R&D [Research and Development], Supply Chain and Finance. They're functionally matrix organisations; functionally linked into the encounter part team both in the US and Ireland; it's the usual collaboration across those teams to make sure that the overarching objectives are being achieved and measured; and largely that's fuel rates, customer service levels, drop sales and products supplied in spec (P20).

Participant P20 explained that collaboration is achieved through "daily management calls with a supply chain point of view with the US" to review "new orders, orders that have executed", orders yet to execute, prioritisation and production plans (P20). Their firm's cross-functional teams also have daily executional calls and physical logistics capacity calls where the latter is considered "the key one from a supply chain point of view because some of those larger projects around controlling the supply chain longer" are linked to strategic corporate objectives (P20). The teams also meet about product development as "product development is obviously heavily integrated into the market" and requires gaining customer insights as well as requirements about regulatory considerations to ensure their product manufacturing complies with each market's requirements (P20). Participant P20 explained that what is compliant in one market may not be compliant in another and the cross-functional teams provide these insights to established solutions. Research and development, in addition to "supply chain physical logistics execution" were also other areas their firm's global cross-functional teams address (P20).

Role of technology. There was a consensus across 13 participants that technology plays a role in enabling and supporting cross-functional relationships and a limited role in managing the relationships, including five Senior Management participants (P1, P3, P5, P6 and P7), seven Middle+ Management participants (P15, P18, P19, P20, P22, P25 and P27), and two Middle Management participants (P28 and P30). As identified by the participants, cross-functional teams at their firms utilise collaboration tools, video conferencing, teleconferencing, data sharing systems, communication apps and systems that provide an integrated cross-functional view, to master, enable and

enhance cross-functional relationship management. There was a consensus across most of the participants that while technology supports cross-functional relationships, the relationship itself needs to be managed face to face.

Three Senior Management participants (P1, P3 and P5) explained how their firms have overcome cross-functional challenges by using technology and collaboration tools which made a massive difference to enabling and enhancing cross-functional relationship management. Senior Management participant P1 explained that their firm previously experienced challenges with "sharing data between sales or business developments, with operations" (P1). Their firm's technology challenge "was recognised as a business problem, not in terms of behaviours for people, but using technology to enable cross-functional relationship management" (P1). By changing their technology to Google via a cloud-based system to utilise its suite of services and applications, participant P1's firm improved cross-functional data sharing and relationships using collaboration tools and video conference tools to support their national business. Enabling cross-functional relationships with improvements in sharing data, communication and collaboration was a key driver in their firm's decision to shift to a cloud-based system with this capability:

> But as part of this shift to Google, we do have much better collaboration tools, video conference tools in the business, which are aiding, particularly being a national business, that intra-firm, cross-functional relationship management, it has been a good enabler to improve in that sense. It was a gap, and that has been one of the key drivers as part of the business case to shift across to Google and its suite of services and applications that it does offer (P1).

Senior Management participant P3 explained that their firm is using a range of tools, apps, and systems at their firm to communicate, collaborate and share data to enable and enhance cross-functional relationship management. Their firm uses 'WhatsApp' to communicate and share files; 'Box' system to share large files; 'Salesforce CRM' (customer relationship management) system to monitor customer relationship management across multiple functions providing an integrated cross-functional view of how each customer is managed; and a video conferencing product 'Starleaf' for "people to communicate and collaborate online" (P3). Participant P3 found the need to "set in place some etiquette around meetings" due to conducting teleconferences

with cross-functional teams in different locations, to ensure that staff are listening and engaged in the meeting. Participant P3 informed his staff that with technology, they do not need to fly from Melbourne to attend a meeting in Brisbane, but they do "need to be in the boardroom in Melbourne, on the screen, and as if you are in the meeting, and engaged" (P3). Participant P3 stated:

> And I've made that set of etiquette and rules in the organisation to get that communication happening, using technology. So, it's a really difficult thing. It, sort of makes people make the effort to come to a meeting and get into it, and then be cross-functional (P3).

Participant P3 explained that he has "used that technology to try and increase the communication in the business" and that it is "really high-quality video conferencing" because they upgraded their network "to have a really first-class network that allowed all of that video conferencing and seamless communication, irrespective of where" the staff are "and it's made a massive difference" (P3).

On whether technology has helped to improve the quality of their firm's cross-functional relationships, Senior Management participant P5 replied: "Absolutely" (P5). To merge two corporations into one business, participant P5 explained that their firm is using a cross-functional team to address several cross-functional gaps by implementing several technologies including an ERP to integrate the business with one operating system. Participant P5 explained that it has been a "very positive collaborative exercise cross-functionally" (P5):

> We've got a project team that's working together from various parts of the business, and the relationships that have been developed out of that piece, because we placed a very strong focus on the relationship wellbeing element of the project, has been very, very positive, so there's no – we got away from the whole ego thing, people holding onto information, all of those sort of behaviours that can quite often undermine a positive project outcome. We're very, very pleased with that collaborative piece. […] they're all very committed to it (P5).

Participant P5 explained that their firm is implementing SAP S4 HANA an ERP product and stated: "its aim is to integrate your business, so that cross-functionally, you've got an efficient integration and transactionally, in your business, including the sharing of information" (P5). Their firm is also implementing selected SAP Ariba

modules which “takes it to a whole another level” among other collaborative systems and stated that “getting one truth is pretty important” from “an information technology perspective, also from a transactional perspective” (P5). Participant P5 stated:

> We’re working very closely, cross-functionally with various parts of the business to develop the solution. One of the key things for us is to actually get one version of the truth through the technology. […] That’s probably one of the key things, because for us to be effective in working collaboratively cross-functionally, we’ve got to have good solid quality information to do that, and the technology will play a big part. […] It also allows us to get real-time analytics on what’s happening across our business with spend (P5).

Participant P5 explained that the technology enables efficient procurement management and supports cross-functional teams and cross-functional processes for sourcing and contract management:

> where you and your customers, so your clients within the business, intra, are able to see the same information and work on specific templates to develop up tenders, and then work together around the automation of the sourcing process […] by working closely with our [internal] clients, we’re able to, more efficiently go to market […] But it does require a lot of partnering to get those templates right, in order to create the efficiencies with the automation of the sourcing process. […] What Ariba sourcing does is allows us to go to a much more sophisticated contract management system that’s properly integrated across all areas of our business (P5).

Interestingly, Senior Management participant P6 explained that technology makes “communications easier” to manage cross-functional relationships but emphasised that “ultimately it comes down to individual relationships” to make the relationships work (P6). Similarly, Senior Management participant P7 confirmed that technology plays a role in managing cross-functional relationships at their firm but “only really as far as communication of data is concerned” (P7).

Middle+ Management participant P19 commented that technology plays a role “only to a limited degree” in managing cross-functional relationships (P19). Participant P19 explained that their firm has: “implemented Oracle into our business which crosses functional boundaries” (P19). Participant P19’s firm uses similar collaboration and communication tools as some of the other participants, stating: “I regularly use

Microsoft Skype for Business, WhatsApp and Zoom to schedule meetings and reviews" (P19). Middle+ Management participant P18 identified similar collaboration tools at their firms as the other participants and highlighted that technological advancements have enhanced "the speed and efficiency of communication within and between departments" as well as "keeping costs under control" (P18). Middle Management participant P30 concurred that technology is useful at their firm for cross-functional teams "for tracking engagements and inputs" but cautioned that the focus at their firm is more about getting the people together to work through competing objectives across the cross-functional teams (P30).

On whether technology plays a role in managing cross-functional relationships, Middle+ Management participant P22 mentioned "it's a 50/50 thing" (P22). Their firm prefers to spend the money to get people to travel to get people in rooms for meetings face to face in addition to using "remote [web conferencing] technologies such as WebEx" (P22). Participant P22 stated: "Technology then kind of plays a role in probably more the governance and management of those projects or cross-functional teams" (P22). Their firm has "rapidly adopted cloud based technology" using "Smart Sheets as a collaborative tool" to be able to access project plans from "anywhere in the world" and to "collaborate with anyone any time" (P22). Participant P22 advised that the cost is minuscule compared to rolling out their own system:

> The cost to implement this type of collaborative cloud based software is very low. It's typically a license fee per month. We tend to find that now people tend to know what's happening more they're up to date. They can do their updates on the cloud, on their laptop at home or on the flight or in the Qantas lounge or wherever it is, they dial into WebEx's. We all have iPhones, we've all got the apps and laptops. That technology probably plays more of a part of giving the people in projects the tools to manage it, keep everyone engaged and collaborating along the journey; managing and tracking that project or cross-functional relationship as well. Use of Kanban boards within there; we also use Agile within our I.T. group. We use a little bit Agile in our Continuous Improvement group as well. It's a bit of a 50/50 mix; we'll never 100% replace the good old fashioned get together meeting with a cup of coffee and get people in a room for a good discussion about the project (P22).

Similarly, Middle+ Management participant P25 also stated that while technologies "definitely" help in achieving business objectives and performance, technology cannot replace managing cross-functional relationships physically (P25):

> But I believe technology will always be a conduit, I believe the relationship is one thing that you – whether it will be a vendor relationship, supplier contractor relationship or internal stakeholder relationship – is one that you always have to manage physically. And it's not something that can be replaced by technology (P25).

Middle+ Management participant P15 explained that their firm supports cross-functional relationships through "real time information sharing" using "interconnected technology platforms with mobile applications and instant notifications" to enhance performance (P15). Similarly, Middle Management participant P28 explained that at their firm "technology plays a role in providing one version of the truth that is available to all functions at the same time" which "supports the close working relationships of the different functions" (P28).

Middle+ Management participant P20 confirmed that technology plays a role in managing cross-functional relationships through their "global ERP system with SAP, that's across the business; that technology gives everybody visibility around the world as to what's happening" (P20). Similarly, Middle+ Management participant P27 also confirmed that technology plays a role in managing cross-functional relationships, enabling information sharing and allowing the cross-functional team to make good decisions:

> operational systems are overlaid across the different business units, but then the range of tools where information is shared across business units and functions so that when you come together as a group, again you have access to the information you need to make good decisions, as a team (P27).

Table 4.10 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 8: Cross-functional relationships and alignment*, using representative supporting data from the findings. Sensing, seizing, and transforming capabilities were discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 8 is provided in Chapter 5.

Table 4.10: Summary of dynamic capabilities and microfoundations associated with *Theme 8: Cross-functional relationships and alignment*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Sensing *sense and shape opportunities and threats*	Process management (Benner & Tushman 2015; Vijaya et al. 2019; Zollo & Winter 2002)	Internal process sensing - Identifying internal inefficiencies (Conboy et al. 2020)	• collaboration improvement is required across the business to leverage spend (P24) • To improve intra-firm cross-functional relationships, participant P30 explained that their firm is focusing on improving collaboration, co-design and working jointly. • found the need to "set in place some etiquette around meetings" due to conducting teleconferences with cross-functional teams in different locations, to ensure that staff are listening and engaged in the meeting (P3)
Seizing *seize opportunities*	Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Stakeholder management (Sodhi 2015) Project and program management (Anand et al. 2009; Mosey 2005; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Building loyalty and commitment • Demonstrating leadership • Effectively communicating (Teece 2009) Communicating goals (Sprafke et al. 2012; Teece 2009) Seizing opportunities while maintaining commitment of key stakeholders (Suddaby et al. 2019)	• "good leadership" to "ensure that there's a good culture and a good set of values and behaviours" and "principles under which everybody in the business is expected to operate" (P7) • based on a 'give and take' culture that is driven by the leadership team for general managers (P22) – "when you cascade that culture down from GM down into leadership team, leadership team to managers, managers to teams, we tend to get it right" (P22) • "ensure achievement of common goals and targets" (P18) • "I have shared [global supply chain] goals with all my operational and maintenance counterparts" (P19) • ensure that "a diverse range of stakeholders" are involved since no one person "knows all the processes and systems within a business" (P22) • "ensure that all departmental stakeholders interests are being considered and met" (P18)
		Mobilising resources to seize opportunities (Khan et al. 2020; Teece 2007, 2009)	• their firm assign and embed champions into cross-functional teams (P25) • their firm appoint suitable project sponsors (P18) • "by choosing top performing individuals who are capable of removing interdepartmental barriers" (P18) • "We've invested in having project managers in each of the functions" (P22) • "run as a cross-functional process, with cross-functional teams involved in major projects" and projects are "tailored very specifically to the business strategy" (P6) • cross-functional teams are established to implement their firm's "supply chain projects and improvement programs" (P17)
Transforming *transform, reconfigure, and manage threats*	Cross-functional relationship management and alignment Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007)	Strategic management-cross-functional relationships and alignment	• align cross-functional teams with senior management during corporate strategy formulation, where supply chain teams, and sales and marketing teams, operations teams, strategy managers and procurement teams, collaborate with senior management, including through strategic planning workshops (P11, P12, P13, P14, P16, P22, P25, P27, P30) • "What I made sure is that the senior executive is on all of those management groups, and we meet monthly" (P3). "We look at how we're servicing our customers here in Australia and New Zealand, so our end-user customers. And we look at how we're servicing our suppliers" (P3).
		Cross-functional collaboration and alignment Combination skills and combination of know-how within the enterprise (Teece 2009)	• mastered intra-firm cross-functional relationship management to achieve firm performance objectives through "departmental and divisional business plans developed from a common set of high-level objectives" […] "properly interconnected is necessary to ensure alignment" (P15) • use common objectives, shared goals, and common access to functions and information to master intra-firm cross-functional relationship management (P15, P18, P19, P27) • their firm has monthly supply chain meetings and invite each of the departments including asset management, finance, operations from site, technical managers, and specialists - "it's a great way to build relationships and understand what other functions of the business are doing" (P25) • "supply chain must be and are at the table with operational management at all times" (P19)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
		Cross-functional champions	• manages cross functional relationships "by choosing top performing individuals who are capable of removing interdepartmental barriers to ensure that tasks and projects are managed in an efficient and timely manner" (P18) • To implement their firm's supply chain strategy and category management strategy, their firm assigns a champion – "that a particular person is going to have a general knowledge about what's going on at this site. When it comes to very specialised areas, you still have a pedigree person" (P25) • "We've invested in having project managers in each of the functions" (P22)
		Cross-functional process management	On managing cross-functional processes • it is a "leadership matter, from a top down perspective, and again, maintaining values and behaviours and principles that are consistent with where the business wants to go" (P7) • apply a key focus on stakeholder identification and engagement by applying project management methodology to manage cross-functional processes to ensure that "a diverse range of stakeholders" are involved since no one person "knows all the processes and systems within a business" (P22) • strategic sourcing is "run as a cross-functional process, with cross-functional teams involved in major projects" and projects are "tailored very specifically to the business strategy" (P6) • "the involvement of all the functions drives a balanced result that can be aligned with the corporate objectives" (P28)

4.2.2.5. *Theme 9: People performance strategic alignment*

A key theme emerged from the data regarding the alignment of people performance to the corporate strategy, to ensure that the firm performs as required within its strategic supply chains. Of the 30 participants, 22 participants provided perceptions and insights regarding the alignment of individual performance and/or team performance to the corporate strategy, which enabled good representation in the analysis, including nine Senior Management participants (P1, P3, P4, P5, P6, P7, P9, P10 and P11), and 11 Middle+ Management participants (P13, P14, P15, P16, P17, P18, P19, P20, P22, P25 and P27), and two Middle Management participants (P29 and P30). There was broad consensus amongst these participants that people performance at their firms is aligned to corporate strategy through the performance management system. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 9: People performance strategic alignment* is provided.

Individual performance strategic alignment. Sixteen participants provided insights regarding individual performance alignment with corporate strategy (P1, P3, P4, P7, P9, P10, P11, P14, P15, P16, P17, P19, P22, P27, P29 and P30), and eight of these participants provided insights regarding reward systems for individual performance linked to corporate strategy (P3, P9, P10, P17, P19, P22, P27 and P30).

Eleven participants including six Senior Management participants (P1, P3, P4, P7, P9 and P10), four Middle+ Management participants (P15, P19, P22 and P27), and one Middle Management participant (P29), explained that their firm's performance management system enables alignment of people performance to the corporate strategy through performance plans, goals, objectives, and metrics that reflect business goals and objectives, as represented by participants P1, P9, P15 and P19:

> It's inbuilt to the [performance management] system to ensure that, how we're measuring our people's performance is aligned to the corporate strategy, amongst other things of course (P1).

> The same [business] performance metrics end up as performance objectives for employees in the business (P9).

> These measures [from the corporate strategy cascade] are then used for individual performance management and development (P15).

> Corporate objectives […] cascaded downwards […] to all employees. All salaried employees receive performance objectives at the start of the year and are measured at the end of the year for their progress. […] Through team member Personal Development goal setting. Different from performance measurement, this element of the goal setting focusses on the individuals personal and professional development, as well as meeting business expectations on compliance, fraud and ethics, suitable behaviours etc. (19).

The Senior Management participant P3 explained that their firm's KPI cascading process entails the KPIs being cascaded into management positions first, then throughout the firm until the KPIs are cascaded into everyone's positions. Participant P3 explained that the KPIs of everyone in the firm are based on the financial performance of the overall business and that all their KPIs are intertwined:

> So, in fact, our whole company, if you're in an operational role or a sales role, or a support-based role, everyone in our company is based on a financial performance of the overall business, they're all intertwined (P3).

Senior Management participant P4 explained that during the cascade of corporate strategy "objectives, SMART [specific, measurable, achievable, relevant, time-bound], aligned to the corporate strategy" are included in individual performance

measurement plans. Their firm's corporate strategy cascade then concludes "with a development section, which determines people development and training requirements aligned to the corporate strategy, ensuring objectives are achieved and personal career aspirations" (P4). Participant P4 explained that their firm conducts quarterly performance measurement reviews as a minimum "to assess whether values adoption, objectives, development and learning is progressing effectively" (P4). Participant P4 emphasised: "Quarterly reviews enhance our ability to regularly determine our position in terms of progress and intervene early and frequently if required" (P4). Participant P4 expressed that it was important to mention that their firm has: "renamed our performance measurement system from performance reviews to people reviews" and elaborated: "The process is a people improvement and benefit process, not perceived as performance management" (P4). To validate the alignment, participant P4 explained: "We hold a one up performance measurement review, ensuring all objectives and development plans are aligned to the corporate strategy" (P4).

Senior Management participant P9 elaborated that their firm uses individual scorecards for most people in their firm which are reset annually and are called business performance objectives and are the building block for their business wide scorecard:

> The building block within the [Firm] business is individual scorecards, called business performance objectives, for most people within the business. These are reset on an annual basis (P9).

Five participants, Senior Management participants P4, P7 and P11, and Middle+ Management participants P14 and P15 indicated that people performance is linked to accountability, to ensure that individuals are held accountable for achieving business objectives, as represented by participant P7. Senior Management participant P7 explained that people performance requires having 'accountability stewardship' and that accountability is built into job descriptions as well as into objectives for business units, stating: "it needs to be very clear, hard accountability" (P7). Participant P7 further explained:

> until someone is succinctly accountable for the delivery of something and therefore wholly accountable, they won't bear the accountability stewardship that you would otherwise anticipate (P7).

Middle Management participant P29 explained that, in alignment with corporate strategy and key results areas, their firm sets performance measures for senior leaders, then leaders "define individual objectives for roles" and their firm also uses people KPIs including a Leadership Index and Employee Engagement Results. Likewise, Senior Management participant P1 also mentioned that their firm uses "role specific objectives and capabilities" as part of their corporate strategy cascade throughout each level in the business. Senior Management participant P4 explained that as the strategic objectives are rolled out across their firm into individual roles: "by nature of role specification they [the objectives] appear 'diluted' compared to the CEO/board agreed strategy, however maintain a key link to achieving the strategic objectives" (P4). Middle+ Management participant P16 explained that their firm's performance management system allows their people to be "easily focused on the KPIs most relevant for them" (P16).

Reward systems for individual performance. Eight participants explained that their firms reward people performance in relation to achieving the firm's performance objectives, including three Senior Management participants (P3, P9 and P10), four Middle+ Management participants (P17, P19, P22 and P27), and one Middle Management participant (P30). After their firm's corporative objectives are cascaded all the way down to the employees as performance objectives, Middle+ Management participant P19 then explained: "Final rankings will feed into annual salary reviews and bonus amounts for those in bonus programs" (P19). Middle Management participant P30 explained that their firms' senior leadership reward progress milestones towards the achievement of corporate strategy.

Similarly, Senior Management participant P3 indicated that their firm's people performance is linked to a financial bonus in relation to overall firm performance. Participant P3 elaborated that their bonus system throughout the firm has motivated staff to 'keep things moving' and has resulted in staff having a vested interest in ensuring that the firm achieves its performance targets every month. Staff, even to the lowest levels in the firm, are so motivated by the bonus system that they actively ask participant P3 every month how the company is going and what they can do to help achieve the targets. Participant P3 indicated that communication of company

performance results to staff and a shared common bonus structure are two key elements to their successful bonus system:

> I've put everyone on a bonus related to overall company performance. That means that someone in service, or someone in customer care, who may not see the revenue every day, doesn't sit on stuff, and they actually move things through the system, because at the end of the day, they've got a vested interest in making sure we hit our numbers. So, every month, I get people coming to me and say, how are we going, what's happening; the guys in the warehouse or customer care; 'should I invoice that today, or are we hitting our numbers' – so, that's a direct involvement of linking bonus structures throughout the organisation. So, there's those two elements, communication and a shared common bonus structure (P3).

Interestingly, Senior Management participant P10 explained that their firm has stopped quarterly and yearly performance development program but use an annual short term incentive program and a three-yearly long-term incentive program for their senior leadership team, stating: "My company has a short term incentive and long term incentive program for the senior leadership team" (P10). Through performance measurement their firm measures the "top 170 employees" and use individual performance measures that align with their corporate strategy (P10).

Short-term incentives are also used at Middle+ Management participant P27's firm. Participant P27 explained that at their firm, their staff are aligned to the corporate strategy through short-term incentives and individual role plans with KPIs that are aligned to metrics in the corporate strategy, to measure the individual's performance:

> the performance management system is underlined at an individual level through short-term incentives and those individual role plans would have key performance indicators that are aligned to the metrics that have been determined as part of the strategy. […] so they [metrics] do make it into individual's performance measurement each year (P27).

Senior Management participant P9 explained that their firm's rewards system is linked to metrics within the individual's business performance objectives which are linked to the corporate strategy, stating: "The intent is that the strategy is connected to the metrics which then become part of an individual's business performance objectives" (P9). Participant P9 explained that metrics specific to the individual's role are linked

to the rewards system. Rewards linked to senior positions are based on quantifiable outcomes and whereas rewards linked to roles with less scope are based on process or qualitative outcomes:

> These business performance objectives are part of the performance management and reward systems and performance measurement is a contributor to the business performance objectives […] Metrics specific to the individual's role for the year. For senior roles these will be outcome orientated and quantifiable, e.g. customer volume retained, however for roles of smaller span they will often be process in nature, e.g. training sessions conducted, or qualitative, e.g. implement project successfully (P9).

Middle+ Management participants P17 and P22 provided examples of rewards and awards issued to supply chain personnel for achieving objectives and performance targets. Participant P17 explained that their firm's recognition system reflects their firm's view of supply chain as a critically important service and that they "measure and reward supply chain operatives" (P17) and provided an example:

> In the warehouse environment all operations are measured in terms of accuracy, speed and safety. Warehouse pickers are rewarded on picking accuracy say on a monthly basis and awards will be presented annually to the best performers (P17).

Similarly, Middle+ Management participant P22's firm give awards for ideas that help the firm to achieve a funding target linked to the corporate strategy through reducing labour costs or improving productivity in their stores:

> the stores have one called Operation Blueprint which is where the team go in and they basically, there's a funding target - they all put ideas towards, to help reduce the cost of labour in the stores or productivity - and so they track that and everyone's part of it and there are awards given (P22).

Team performance strategic alignment. Fourteen participants provided insights regarding the alignment of team performance to corporate strategy, which enabled good representation in the analysis, including six Senior Management participants (P1, P4, P5, P6, P9, and P10), and eight Middle+ Management participants (P13, P17, P18, P19, P20, P22, P25 and P27). Senior Management participant P10 and Middle+ Management participants P22 and P27 explained that their firms set performance measures and strategic objectives for senior leadership teams.

Senior Management participant P1 and Middle+ Management participant P20 explained that teams across their firms are responsible for achieving targets for team performance. For example, participant P1 explained that their firm's operations team, and the sales and business development team, each have team performance targets linked to the commercial performance of the business and the corporate strategy. Middle+ Management participant P25 explained that their firm's category management team is responsible for the strategic performance of top spend items. Middle+ Management participant P13 explained that their firm determines strategic objectives for their supply chain team "to meet the business needs". Middle+ Management participant P19 explained that "business objectives for the services teams will always have a large financial component" and that he sets performance objectives and goals for his global supply chain team (P19). Middle+ Management participant P22 also explained that their firm sets performance targets each year for their supply chain team that are linked to corporate strategy.

Four participants indicated that their firms rely on the performance of project teams to complete projects aligned with corporate strategy, including two Senior Management participants (P5 and P6), and two Middle+ Management participants (P17 and P18), as represented by participants P5 and P6. Senior Management participant P5 provided an example where their firm is reliant on a large project team to achieve a significant strategic cost savings target for the firm. Similarly, Senior Management participant P6 also explained that their firm is also reliant on project teams to complete major projects that are "tailored very specifically to the business strategy" (P6).

Senior Management participant P4 explained that their firm focuses on both team performance and individual performance to achieve strategic objectives and stated: "we rapidly develop a high performing culture, high performing teams and high performing individuals" (P4). Senior Management participant P9 explained that their firm use "metrics common to a team" and that business performance metrics are split "into component metrics relevant for separate teams in the business units" (P9). Participant P9 elaborated: "This builds relevance while retaining connection with the overall BU [business unit] and business objectives" (P9).

Table 4.11 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 9: People performance strategic alignment*, using representative supporting data from the findings. Seizing and transforming capabilities were discovered in the data. Sensing capabilities were not discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 9 is provided in Chapter 5.

Table 4.11: Summary of dynamic capabilities and microfoundations associated with *Theme 9: People performance strategic alignment*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Seizing *seize opportunities*	Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Developing individual performance objectives to deliver corporate strategy	• the KPIs of everyone in the firm are based on the financial performance of the overall business and that all their KPIs are intertwined (P3) • "define individual objectives for roles" (P29) • their firm uses "role specific objectives and capabilities" as part of their corporate strategy cascade throughout each level in the business (P1) • strategic objectives are rolled out across their firm into individual roles: "by nature of role specification they [objectives] appear 'diluted' compared to the CEO/board agreed strategy, however maintain a key link to achieving the strategic objectives" (P4) • Five participants indicated that people performance is linked to accountability, that is ensuring that individuals are held accountable for achieving business objectives (P4, P7, P11, P14, P15)
		Developing team performance objectives to deliver corporate strategy	• sets performance objectives and goals for his global supply chain team (P19) • their firms set performance measures and strategic objectives for senior leadership teams (P10, P22, P27) • their firm determines strategic objectives for their supply chain team "to meet the business needs" (P13)
Transforming *transform, reconfigure, and manage threats*	People performance strategic alignment Training and development (Azadegan et al. 2008; Vijaya et al. 2019) Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007)	Individual performance strategic alignment Individual performance strategic alignment using performance system technology	• broad consensus amongst participants that people performance at their firms is aligned to corporate strategy through the performance management system • 16 participants provided insights regarding individual performance alignment with corporate strategy • "It's inbuilt to the [performance management] system to ensure that, how we're measuring our people's performance is aligned to the corporate strategy, amongst other things of course" (P1) • "The same [business] performance metrics end up as performance objectives for employees in the business" (P9) • "These measures [from the corporate strategy cascade] are then used for individual performance management and development" (P15) • "All salaried employees receive performance objectives at the start of the year and are measured at the end of the year for their progress" (19)
		Governance • Achieving incentive alignment (Teece 2009)	• eight participants provided insights regarding reward systems for individual performance linked to corporate strategy • their firms' senior leadership reward progress milestones towards the achievement of corporate strategy (P30) • "I've put everyone on a bonus related to overall company performance" (P3) • Through performance measurement their firm measures the "top 170 employees" and use individual performance measures that align with their corporate strategy (P10)
		People development strategic alignment	• "We then conclude with a development section, which determines people development and training requirements aligned to the corporate strategy, ensuring objectives are achieved and personal career aspirations" (P4)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
			• "goal setting focusses on the individuals personal and professional development, as well as meeting business expectations on compliance, fraud and ethics, suitable behaviours" (P19) • These measures [from the corporate strategy cascade] are then used for individual performance management and development (P15).
		Team performance strategic alignment	• 14 participants provided insights regarding team performance alignment to corporate strategy • operations team, and the sales and business development team, each have team performance targets linked to the commercial performance of the business and the corporate strategy (P1) • category management team is responsible for the strategic performance of top spend items (P25) • strategic objectives for their supply chain team "to meet the business needs" (P13)

4.2.2.6. *Theme 10: Addressing behavioural issues*

Theme 10 was established from the question pertaining to addressing behavioural factors that may arise in relation to the strategic performance management system, to ensure that the firm performs as required within its strategic supply chains. In this section, the term strategic performance management system has been shortened to performance system for brevity. Of the 30 participants, 18 participants provided perceptions and insights in relation to behavioural factors which enabled good representation in the analysis, including seven Senior Management participants (P1, P3, P4, P6, P7, P9 and P10), eight Middle+ Management participants (P15, P16, P17, P19, P22, P24 P25 and P27), and three Middle Management participants (P28, P29 and P30). There was a consensus amongst most of these participants that their firms adopt proactive strategies to minimise behavioural factors relating to the performance system. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 10: Addressing behavioural issues* is provided. Twelve participants did not provide behavioural-related insights in relation to the strategic performance management system which did not impact the analysis, including four Senior Management participants (P2, P5, P8 and P11), and eight Middle+ Management participants (P12, P13, P14, P18, P20, P21, P23 and P26).

Interestingly, Senior Management participant P1 indicated that their firm has not experienced behavioural issues in relation to using their performance system which measures "people against the values of the business and goals of the business". Participant P1 explained: "there's been no examples that comes to mind where people have been straying or deviating from that as such" (P1). Participant P1 identified

contributing factors to this success including, linking performance management to their firm's values and pillars from the corporate strategy, ensures that people in their firm are all aligned, in addition to measuring and assessing alignment to the values and pillars:

> And I do think that having the company, the pillars like I mentioned before, you know people first, strong capability, safety always and sustainability – having the individual roadmap linked to the pillars, and also our values being collaborative, progressive, trustworthy, united, so I think linking performance management to the values and pillars which make up part of the overall corporate strategy, I think it's a good way of ensuring that we are all aligned, and also measuring and assessing alignment against those values and pillars along the way (P1).

Senior Management participants P3 and P6 both explained that performance reports that show poor performance or low compliance, can cause a negative impact on behaviour, with participant P6 emphasising:

> when you're presenting, reporting, or when you're going in to get the data, and then working with the business units on the reporting, you have to take considerations like that into account (P6).

Senior Management participant P3 indicated that the behavioural reaction to the performance system at their firm is dependent on two factors. The first factor is whether the individual likes or dislikes receiving performance data. Participant P3 explained that at their firm, some people are uncomfortable receiving performance data daily and some people "love it" (P3). When performance results are poor, participant P3 explained that the 'uncomfortable' staff can be negatively affected:

> So, some people are uncomfortable with the fact that they get data every day. It actually has an adverse effect on them, if the numbers aren't performing well. Some people love it. So, depending on the type of individual you might be, it can be either a really good thing, or not a good thing. But that's one thing (P3).

Participant P3's second factor is about getting people to use the performance system. Participant P3 explained the importance of "getting people to spend the time and invest the time in using the tools well" and "engaging people and training them in growing expertise" (P3). Participant P3 indicated that 'selling' the benefits of the tool to the people, helps to gain buy-in and increases engagement with using the tool, otherwise

costs can ‘blow out’ when people do not understand the tool and when the tool is not utilised. Participant P3 emphasised the importance of doing enough research before implementing a system and to engage staff in the implementation so that staff understand the power of the tool:

> So, that’s another behavioural issue, if people don’t do enough research before they implement a project, or they’re not engaged with, generally in the business, because people don’t understand the power of what they’ve got in front of them. […] So, you’ve got to be very careful about your investment (P3).

Similarly, Middle+ Management participant P17 emphasised that the number one requirement to address behavioural issues pertaining to their performance system at their firm is through “committed, visible and sustained leadership from the MD [Managing Director], CEO, GM and the leadership team” (P17). Participant P17 elaborated that: “It [information about the performance system] must be deliver to all levels of business in a language that simply describes what it is and what it will do for the staff and their customers” (P17). Likewise, Middle+ Management participant P19 expressed that at their firm, their “performance management system must be simple and user friendly” (P19). Participant P19 elaborated:

> I have employees based all over the world with varying levels of computer skill. If it's complex, drawn out and confusing, you get scarce feedback and the process loses all credibility. They will basically put any rubbish in any box just to get it done (P19).

Participant P19 explained that their firm has addressed these behavioural factors by ensuring that their performance system is simple and user friendly. Similarly, Middle+ Management participant P25 stated that their firm addresses behavioural issues pertaining to using the performance system correctly, by ensuring that training is provided and that disciplines are in place. Middle+ Management participant P15 also explained that their firm addresses behavioural factors pertaining to their performance system by ensuring that a consistent discipline is applied to business processes and that business processes are driving the technology “rather than the other way around” (P15). Interestingly, Senior Management participant P10 explained that their firm has stopped using a quarterly and yearly performance development system and that their measurement system is based on measuring the performance of their senior leadership

team and the top 170 employees in addition to the performance of the firm and business units.

Similar to Senior Management participant P3 stating that some of their firm's staff 'love' receiving performance data daily, Middle+ Management participant P22 also stated that their firm's supply chain team "live and die" by their Supply DIFOT metric and the Good Service Score. Participant P22 emphasised the importance of these measures and indicated that their firm's culture starts from the corporate strategy rollout "down to the team members who are actually executing the task" (P22). Participant P22 explained that "someone, who's unpacking containers" will not receive a copy of the firm's corporate strategy but they will "see a version of a [corporate] plan that relates specifically to the tasks they're doing" (P22). Participant P22 explained that "you can sit down with them and they can understand how many containers they're going to unpack this year and what productivity rate we've got to do it" (P22). Participant P22 emphasised the importance of cascading down the culture: "when you cascade that culture down from GM down into leadership team, leadership team to managers, managers to teams, we tend to get it right" (P22). Participant P22 explained that their firm has a culture "where it's okay to speak up" (P22):

> Having a culture where it's okay to speak up obviously helps. We can see that in our climate survey results; people when they get that specific question, we get a very high response rate and we get a very good mark for that. It is okay to challenge what we're doing; people generally think that we make decisions that are there to benefit the business (P22).

There was consensus across five participants including Senior Management participants P3, P6 and P9, and Middle+ Management participants P16 and P27, that people are driven by their individual metrics. Middle+ Management participant P27 stated: "the performance management system that effects individuals, people are very much driven by whatever their individual metrics are, and that then can drive both good and bad behaviour" (P27). Participant P27 explained that metrics that do not make sense or are not the right metrics, do not incentivise the right behaviour. Participant P27 elaborated that there are two key issues to address including understanding what the firm is trying to motivate and what behaviour the firm is trying

to incentivise, and then making sure that the metrics and the system allows that (P27). Participant P27 cautioned:

> The key is to get the metric right, and once you get the metric right, making sure you have the right technology or data or information to support it. So, if you don't get that number, or metric, or description right in the first place, then the technology is not going to help (P27).

Middle+ Management participant P16 explained that as addressed by their firm's supply chain strategy, "it is essential to ensure KPIs that drive the corporation's objectives always take priority over KPIs that drive parts of the business" (P16). Participant P16 explained that "conflicts that drive parts of the business against each other" (P16) are addressed through escalation, management processes, and integrated processes like sales and operations planning which brings cross-functional teams together, to focus people on KPIs that drive the corporation's objectives.

Similarly, Senior Management participant P7 also mentioned that behavioural issues can occur when there are "individual and business unit reviews about things that contravene each other" (P7). Participant P7 explained that this issue is addressed at their firm by focussing people on what is best for the firm and by taking an integrated approach to bring the right parties together from across the business:

> the way to get around that is to focus on the integration between different business units to get a balance best for business approach. […] so that people in concert adopt best for business. […] the key to that again is the integration of people and integration of different parts of business (P7).

In contrast, Middle+ Management participant P24 explained a behavioural issue related to their firms' exponential rapid growth, indicating that their executive team are seemingly very focused on the firm's performance in the market, more than the improvements participant P24 would like to make to support the growth. Participant P24 stated: "Difficult to sell our needs to the executive team who are very focused on the […] price" (P24).

Senior Management participant P9 provided a comprehensive list of behavioural issues encountered at their firm and the solutions utilised by their firm to address each issues including: "difficulty in committing to targets" which is addressed by "helping

people to see context, the bigger story, why it is needed and involve them in building how it can be achieved"; "lack of confidence in data interpretation, accuracy, integrity" which is addressed by "constant effort to standardise, seek objectivity and select robust measures within the tolerance of the measurement techniques"; "not feeling as able to influence outcomes" which is addressed by ensuring that "metrics are broken down to measures that are recognisable and able to be influenced by the team and individual" and by creating "the connection of this measure to the higher order metrics"; "conflict between metrics" when "trade-offs have to be made" which is addressed by working on "making this visible, having clear priorities, applying the same guidelines to everyone and using examples to communicate the decision making"; "knowing the relative importance of metrics" which is addressed by "weighting schemes in scorecards and performance management, reward systems"; "measures chosen do not tell the story" which is addressed by being "aware of data limitations, use simple models, be flexible in applying the outcomes of the measurement"; "people want to measure progress not outcomes" which is addressed by "education, challenge, top down direction"; "non timely measures become excuse for lack of outcomes achieved" which is addressed by "up front choice of measures, general process of building commitment and ownership" (P9).

Senior Management participants P1 and P4, and Middle Management participant P29 explained that their firm's performance systems are aligned with the values of the firm. Participant P29 stated: "At this major […] distribution company the performance measurement system spans behavioural objectives that are set and defined in alignment with its organisational values and leadership capability standards" (P29). From a similar proactive perspective, Senior Management participant P4's firm places a strong emphasis on implementing and aligning the firm's values across the firm to rapidly develop a high performing culture, teams, and individuals. Participant P4 explained that the success of their firm's corporate strategy is dependent on the "adoption of organisational values and culture" (P4). To lead by example, participant P4 explained that their senior management team make time during annual corporate strategy workshops to "self-reflect on the values and culture and provide real life examples of us, all people, living and not living these values" (P4). During corporate strategy rollout, participant P4 explained that: "The performance measurement plans commence with a section dedicated to self-ranking adoption of the values,

understanding of the corporate strategy and personal contribution to the strategy" (P4). Participant P4 explained that "the correlation between values and strategy is critical" and stated: "by implementing appropriate values we aim to emphasise high expectations, people engagement, teamwork and big picture thinking, breaking paradigms and shifting 'the norm' " (P4).

Role of technology. Eleven participants provided insights regarding the role of technology in addressing behavioural factors, including two Senior Management participants (P6 and P9), six Middle+ Management participants (P15, P16, P19, P22, P25 and P27), and three Middle Management participants (P28, P29 and P30). Middle+ Management participant P19 reiterated that their firm has addressed behavioural factors associated with their performance system by making sure that their performance system technology is simple and user friendly for staff with varying levels of computer skill. Senior Management participant P6 confirmed that at their firm technology plays a role in addressing behavioural factors as "technology makes things a lot more transparent, absolutely, so, you can't hide" (P6). Participant P6 cautioned that the critical factor is the "human factor of how you present it, how you interact with the people and do the change management to then get things in place" (P6). Participant P6 then emphasised: "Systems are great, but the culture and the people are going to trump them every single time" (P6). Similarly, Middle+ Management participant P22 also mentioned that getting the human element interacting is important at their firm over the technology, as part of the strategy journey:

> Now again that technology is good for a certain point but we do a quarterly get together, we bring leadership teams and DCM's [Distribution Centre Managers] and supervisors and team leaders together and get that human element interacting as part of that strategy journey (P22).

Middle+ Management participant P16 confirmed that at their firm technology plays a role in addressing behavioural factors as it provides "more accurate and online reporting" and "can support speed and accuracy of decision making" (P16). Middle Management participant P30 also explained that once their firm's performance system technology was introduced and became mainstreamed first, it ceased to be a cultural change barrier and became familiar and safe. Similarly, Middle Management participant P28 explained that at their firm, technology "where it is understood and

trusted, can play a significant role in addressing behavioural factors" (P28). Participant P28 elaborated:

> once technology is put in place and understood and trusted then change management efforts are supported as visibility is gained on true performance and people can see the output of the changes made (P28).

Middle Management participant P29 confirmed that at their firm technology plays a role in addressing behavioural factors with their performance management system by recording behavioural objectives and tracking qualitative and quantitative performance:

> The performance management system records the behavioural objectives that are defined by the leader for each employee and qualitative and quantitative performance measurement platforms are enabled within the system to track the level of performance achieved (P29).

Senior Management participant P9 confirmed that at their firm technology plays a role in addressing behavioural factors, stating: "Yes technology has a significant role to play as a support tool for leaders in addressing behavioural factors that arise" (P9). Participant P9 explained that at their firm, technology assists their leaders to recognise and eliminate behavioural factors and resolve behavioural issues through "steps that mitigate or allow the leader to give their team a better understanding and context of the objectives in performance measurement" (P9). To address behavioural factors, participant P9 elaborated that at their firm, technology enabled the following improvements:

> measurement that captures more data at a greater frequency […] the data becomes available in real time […] connectivity between systems and the use of interfaces such as data lakes. This allows for more consistent presentation, access for all to an agreed 'one source of truth' and the ability to use multiple presentation formats to suit audience interest and connection; the capability of systems to analyse and interpret information generating guidance systems, interactivity, improved scenario planning and insight (P9).

Middle+ Management participant P27 confirmed that technology plays a role in measuring performance but that "it's very difficult to have technology influence behaviour" and stated: "you have to get the technology to give you the answers or the

data that you want, that then influences the behaviour" (P27). Middle+ Management participant P15 also confirmed that at their firm technology plays a role in addressing behavioural factors by "providing insight into how well processes are followed" (P15). Participant P15 elaborated that the employees at their firm are "willing and able to provide feedback on the technology and processes they are required to use and then management listens and responds to support improvement" and allows the insight provided through technology to be useful (P15). Middle+ Management participant P22 explained that their firm's performance system technology is important for "keeping the team up to date as to where we are with our strategy and are we on track off track" as well as "getting feedback along that journey as to issues or challenges that people have or ideas" (P22).

Table 4.12 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 10: Addressing behavioural issues*, using representative supporting data from the findings. Sensing, seizing, and transforming capabilities were discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 10 is provided in Chapter 5.

Table 4.12: Summary of dynamic capabilities and microfoundations associated with *Theme 10: Addressing behavioural issues*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Sensing *sense and shape opportunities and threats*	Strategic performance behaviour sensing Process management (Benner & Tushman 2015; Vijaya et al. 2019; Zollo & Winter 2002) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Sensing behavioural issues related to the strategic performance management system Sensing how individuals respond to performance management Sentiment sensing (Conboy et al. 2020)	• people are driven by their individual metrics (P3, P6, P9, P16, P27) • there are two key issues to address including understanding what the firm is trying to motivate and what behaviour the firm is trying to incentivise (P27) • "difficulty in committing to targets" which is addressed by "helping people to see context, the bigger story, why it is needed and involve them in building how it can be achieved" (P9) • behavioural issues can occur when there are "individual and business unit reviews about things that contravene each other" (P7).
		Sensing behavioural issues related to the strategic performance management system technology	• performance reports that show poor performance or low compliance, can cause a negative impact on behaviour (P6) • their firm, some people are uncomfortable receiving performance data daily and some people "love it" (P3); "So, some people are uncomfortable with the fact that they get data every day. It actually has an adverse effect on them, if the numbers aren't performing well" (P3) • "I have employees based all over the world with varying levels of computer skill. If it's [performance system] complex, drawn out and confusing, you get scarce feedback and the process loses all credibility" (P19)
Seizing *seize opportunities*	Strategic performance behaviour management	Adopting proactive strategies to minimise behavioural issues related to the strategic	• "it is essential to ensure KPIs that drive the corporation's objectives always take priority over KPIs that drive parts of the business" (P16)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
	Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Stakeholder management (Sodhi 2015) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	performance management system Seizing opportunities by overcoming resistance to change (Kareem & Alameer 2019; Khan et al. 2020)	• "The key is to get the metric right, and once you get the metric right, making sure you have the right technology or data or information to support it" (P27) • "conflicts that drive parts of the business against each other" (P16) are addressed through escalation, management processes and integrated processes like sales and operations planning which brings cross-functional teams together, to focus people on KPIs that drive the corporation's objectives (P16) • issue is addressed at their firm by focussing people on what is best for the firm and by taking an integrated approach to bring the right parties together from across the business (P7)
		Adopting proactive strategies to minimise behavioural issues related to the strategic performance management system technology	• "when you're presenting, reporting, or when you're going in to get the data, and then working with the business units on the reporting, you have to take considerations like that into account" (P6) • 'selling' the benefits of the tool [performance system] to the people, helps to gain buy-in and increases engagement with using the tool, otherwise costs can 'blow out' when people do not understand the tool and when the tool is not utilised (P3) • the number one requirement to address behavioural issues pertaining to their performance system at their firm is through "committed, visible and sustained leadership from the MD, CEO, GM and the leadership team" (P17) • their firm's performance system technology is important for "keeping the team up to date as to where we are with our strategy and are we on track off track" as well as "getting feedback along that journey as to issues or challenges that people have or ideas" (P22)
		Building loyalty and commitment • Recognising non-economic factors, values, and culture (Teece 2009)	• their performance system which measures "people against the values of the business and goals of the business" (P1) • "At this major […] distribution company the performance measurement system spans behavioural objectives that are set and defined in alignment with its organisational values and leadership capability standards" (P29) • their senior management team make time during annual corporate strategy workshops to "self-reflect on the values and culture and provide real life examples of us, all people, living and not living these values" (P4) • their firm's culture starts from the corporate strategy rollout "down to the team members who are actually executing the task" (P22)
Transforming *transform, reconfigure, and manage threats*	Training and development (Azadegan et al. 2008; Vijaya et al. 2019) Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007) Organisational values and culture alignment	Knowledge integration • Training of employees (Khan et al. 2020) Knowledge management • Learning (Teece 2009)	• the importance of "getting people to spend the time and invest the time in using the tools well" and "engaging people and training them in growing expertise" (P3) • their firm addresses behavioural issues pertaining to using the performance system correctly, by ensuring that training is provided and that disciplines are in place (P25) • "It [information about the performance system] must be deliver to all levels of business in a language that simply describes what it is and what it will do for the staff and their customers" (P17)
		Aligning behaviours with the values and culture of the firm	• firm's performance systems are aligned with the values of the firm (P1, P4, P29) • "assessing alignment against those values and pillars along the way" (P1) • "At this major […] distribution company the performance measurement system spans behavioural objectives that are set and defined in alignment with its organisational values and leadership capability standards" (P29) • firm places a strong emphasis on implementing and aligning the firm's values across the firm to rapidly develop a high performing culture, teams, and individuals (P4) • their firm's culture starts from the corporate strategy rollout "down to the team members who are actually executing the task" (P22)

4.2.2.7. *Theme 11: Strategic supply chain relationships and alignment*

Theme 11 was established from the question pertaining to mastering cross-firm supply chain relationship management and the role of technology, to ensure that the firm performs as required within its strategic supply chains. Of the 30 participants, 23 participants provided perceptions and insights in relation to supply chain relationships with strategic customers and/or strategic suppliers which enabled good representation in the analysis, including nine Senior Management participants (P1, P3, P4, P5, P6, P7, P8, P9 and P11), and 13 Middle+ Management participants (P12, P13, P14, P15, P16, P17, P19, P20, P22, P24, P25, P26 and P27), and one Middle Management participant (P29). Seven participants did not provide insights in relation to supply chain relationships which did not impact the analysis, including Senior Management participants P2 and P10, Middle+ Management participants P18, P21 and P23, and Middle Management participants P28 and P30.

4.2.2.7.1. *Theme 11a: Supply chain relationships and alignment with strategic customers*

Sixteen participants provided perceptions and insights regarding their firm's relationships with strategic customers, including five Senior Management participants (P1, P3, P4, P9 and P11), 10 Middle+ Management participants (P12, P13, P14, P15, P16, P17, P19, P20, P26 and P27), and one Middle Management participants (P29). As identified in *Theme 2: Developing strategic supply chain strategies* in Section 4.2.1.2, there was a consensus across nine of these participants (P3, P11, P12, P13, P14, P16, P17, P19 and P20) that their firms develop and incorporate customer-focused supply chain strategies into their corporate strategy.

The participants' firms master cross-firm customer relationship management and alignment with strategic customers through executing services promised, client meetings, constantly reviewing performance, performance reporting, account management, identifying customer needs, maintaining compliance, meeting legislative requirements, sourcing the right products and integrating processes and technology, in alignment with corporate strategy. There was a consensus across all these participants that technology plays a role in supporting customer relationships. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic

capabilities associated with *Theme 11a: Supply chain relationships and alignment with strategic customers* is provided.

Senior Management participant P1 explained that their firm has mastered cross-firm customer relationship management through monthly reporting, KPI reporting and account management, as their firm has contract logistics service level agreements (SLA) and KPI's that they need to fulfil. Participant P1 elaborated:

> And to demonstrate whether we've met those SLA's or KPI's or not, that will be through regular reporting and account management. So managing client relationships, we'll have the operational team who are responsible for discharging and executing the service offering that we promised. Then we'll have the account management side who will assist and take the lead on, periodical meetings, whether they're monthly or quarterly review meetings, which will include presentations with the various metrics and KPI's. Not just the quantitative metrics like, you know conventional or traditional DIFOT as such, but also the qualitative piece is a big part of that discussion (P1).

Participant P1's firm also masters cross-firm customer relationship management through meeting chain of responsibility obligations, having client meetings, aligning with their client's values and performance expectations, maintaining compliance, and meeting all legislative requirements. Participant P1 explained that their firm has "an enviable portfolio of clients" with "major retailers" and "major well recognised blue-chip Australian companies across a diverse range of industry sectors" (P1). Participant P1 emphasised that a lot of their partners "don't partner with transport companies or logistics firms, who don't have a good track record when it comes to compliance governance, business processes" (P1). Participant P1 elaborated:

> Chain of responsibility in our industry and safety, that is a big, big part of our business, a big part of our one-on-one meetings and management meetings. Because again, I mentioned earlier, but we do have an enviable portfolio of clients, and also mentioned or inferred to the fact that a lot of those big business who are focused on corporate social responsibility, and compliance and governance, so they won't partner with other firms that don't or are not aligned with their values and performance expectations. So we need to ensure that we're constantly reviewing and assessing how we're performing in that space; how we're keeping people safe, but also how we're keeping up with legislation and ensuring that we're compliant and meeting all the legislative frameworks that exist with NHDR (National Heavy Vehicle Regulator) and

> WorkCover, and other laws that exist at state level and federal level. That's part of the reason why we are selected by our existing customers, because we do demonstrate that we are a compliant business, so it's important that, that being a big part of our value proposition, that we stay ahead of the curb (P1).

Participant P1 also confirmed that technology plays a role in managing cross-firm relationships with customers. Participant P1 emphasised that "technology is a huge part of our industry, and it's growing" and that "technology does actually underpin a huge part of our relationship management" and that customers expect their firm to have "world class or market leading technology" (P1). Participant P1 explained that their firm uses reporting and collaboration technology that can be accessed by clients which provides a "level of visibility and transparency" (P1). Participant P1 explained that technology including telematics enables their firm to demonstrate chain of responsibility obligations and it provides evidence and removes subjectiveness from their reporting:

> And when it comes to telematics, that is a big part of managing our inter-firm relationships with clients, because we need to be able to demonstrate, and particularly with chain of responsibility, telematics on fatigue management, speed management, weight mass management, and basic GPS tracking. Technology does actually underpin a huge part of our relationship management. It provides that evidence and takes a lot of the subjectiveness out of what we're reporting on (P1).

Senior Management participant P3 explained that their firm has mastered cross-firm customer relationship management by meeting with major customers at least three or four times a year, aligning strategies and reviewing how customers are serviced (P3). Participant P3 explained that their firm has "about seven hundred customers in three or four different market segments" who are regarded as 'end users' and their firm also regards their suppliers as their customers as well because their firm represents their suppliers in the marketplace (P3). Participant P3 is involved in managing relationships with major customers to ensure that his firm's customers receive the products that they need, as he is heavily involved in managing the relationships with the major suppliers regarding these products. Participant P3 also confirmed that at their firm technology plays a role in managing cross-firm relationships with customers, "but not as much". Participant P3 explained that their firm uses email, their business intelligence tool, CRM system, telephone, video conferencing, "but in terms of understanding strategy

and aligning strategies and that, much of it is still very much face to face, and verbal communication" which participant P3 considers more effective (P3). Participant P3 explained that their firm is also implementing an EDI program with one of their firm's big customers for the ordering process and to "help both businesses flow the product through their systems a lot better, rather than your traditional warehousing and that type of thing" (P3).

Senior Management participant P4 explained that their firm utilises processes that enable their leadership team to keep focused on strategic objectives pertaining to customer relationship management to ensure that the firm's "customers and product users remain key priorities" (P4).

Senior Management participant P11 explained the comprehensive supply chain management approach that their firm applies to maintain relationships with their customers including having "a really good feel for what the customers want", dictating "trends in the market" and "new products", and helping customers to establish computer systems in their stores to enable the customer to see the inventory at participant P11's firm (P11). Participant P11 confirmed that technology plays a role in managing relationships with customers and that their firm's customer's stores are family owned businesses and stated: "Their [customers] sons and daughters are taking over the business now, and they want everything done on a computer" (P11). Their firm took the opportunity to install computers in their customer's stores, participant P11 stated: "okay, we'll put a computer in yours, and you can see our inventory" (P11). Participant P11 elaborated: "So, you can look up the inventory, oh, it's in stock, you can order it and support, you can reserve it" (P11). Participant P11 explained that their firm's competitors are not able to do this, stating: "Whereas our competitors can't do that, because they haven't got as much money" (P11).

Customer relationship management is a key strategy utilised by Middle+ Management participant P14's firm who help their business customers to gain the benefits of "strategic supply chain management to improve competitiveness and reduce costs" (P14). Participant P14 explained that their firm identifies how their customers can reduce inventory holdings and identify "effective ways to compete with e-commerce competitors" (P14). Participant P14 also explained that their firm has identified that

"technology such as AI [artificial intelligence] and Machine Learning fundamentally is changing the supply chain landscape" (P14). Their firm has been having "very strategic" discussions regarding this technology with their customers in Asia and the United States of America but found that it is of "little interest to most customers" they are talking to in Australia (P14).

Middle+ Management participant P15 explained that their firm has mastered inter-firm relationship management with customers through "the development, monitoring and management of agreed objectives" (P15). Participant P15 explained that "mutual trust and respect" are "built through efforts on both sides to establish and maintain effective working relationships" to align priorities (P15). Participant P15 confirmed that at their firm technology plays a role in managing cross-firm relationships with customers, as "technology can provide data and information to support the monitoring and management of cross firm performance" (P15). Participant P15 explained that their firm:

> uses technology that provides customers with real time information about deliveries and automates the proof of delivery storage and retrieval process. With this technology we have been able to move beyond the traditional myopic focus on DIFOT and work on properly prioritising the needs of customers (P15).

Middle+ Management participant P16 explained that technology at their firm helps to drive "visibility and communication, from customer through distribution to planning and stock management" and "besides visibility it also supports better performance in range of areas" (P16).

Middle+ Management participant P17 explained that the "majority of commercial arrangements [with their firm's customers] have supply chain performance requirements" (P17). As a supplier of health care products, participant P17 explained that "accurate demand forecasting is extremely difficult, particularly with high volume consumables subcategories" because their firm's customers are "notoriously bad at forecasting but skilled at ordering volumes that relate in no way to their ordering history" (P17). Despite these challenges, their firm aims to provide an outstanding customer experience by "achieving a repeatable DIFOTQ of 100%" to satisfy the customer's stakeholders including the critical staff performing services, senior management and their consumers, and this helps to optimise the customer's business

efficiency, ensure no negative impact on the customer's budgets and supports the customer's performance KPIs (P17). Participant P17 explained that this level of best practice supply chain performance, coupled with supplying products for critical services, increases their firm's ability to "enter into a negotiated [supply] arrangement rather than compete with the market" (P17). Participant P17 explained that "there has been a lot of work around the establishment of the National Product Catalogue" which allows their firm to share health care product data online with customers (P17).

Middle+ Management participant P19 confirmed that at their firm technology plays a role in managing cross-firm relationships with customers, and stated: "Because my customers are scattered around the world, different communication tools are commonly used to keep in touch and discuss operation issues" (P19). Participant P19 explained that their firm uses "Microsoft Skype for Business, WhatsApp and Zoom to schedule meetings and reviews" and cautioned that "different [global] regions use different tools depending on the effectiveness of that program in that region" (P19).

Middle+ Management participant P20 explained that their firm has mastered inter-firm relationship management with customers through integrated processes to gain visibility of their customers forward order plans and forecasting, and stated: "Certainly from a B2B point of view we have integrated processes with customers" (P20). Participant P20 explained that their firm applies a key focus on lead indicators including service level and working capital to ensure that their firm gives the "customer their true demand" (P20). Participant P20 confirmed that at their firm technology plays a role in managing cross-firm relationships with customers, and stated:

> Mature markets like Australia and New Zealand we work on customer platforms, with [major customer] and [major customer], their supplier portals provide visibility of forward order plans and forecasting etc where we can bring that information into our planning tool (P20).

Middle+ Management participant P26 explained that their firm train their customers "in the use of the products and their adoption is measured" and their firm also monitors product quality after the sale. Middle+ Management participant P27 explained that their firm manage cross-firm supply chain relationships through end-to-end supply

chain performance meetings involving suppliers, customers and other supply chain parties and explained that their firm build "supply chain groups":

> the way we do it in supply chain is we're a member of quite a few - the various stakeholders in the supply chain come together to review performance on a regular basis, and talk through issues, as I said earlier, with an intent to optimise performance of the supply chain. […] it really is about building groups, supplier groups, customer groups, but supply chain groups more than anything, so it would involve customer, supplier, and any other party that's in the supply chain (P27).

Interestingly, Middle+ Management participant P27 provided the following cautious insight:

> Obviously, the whole supply chain is about creating value, how we do that as part of supply chain isn't necessarily driven by the wider supply chain objectives, you know, we always have this altruistic view that everyone in supply chain works together for the greater good, but that quite often isn't the case (P27).

Participant P27 also confirmed that at their firm technology plays a role in managing supply chain relationships with supply chain groups including customers, suppliers, and other supply chain parties, and stated:

> Again, there are some systems that have common access across a range of stakeholders on the supply chain. So, we go out to the technology to be able to do that, and then having common access to some of those systems and that data is, I guess the basis of how to manage or how to maintain relationships so that people have access to the same data, so they can have an open and honest discussion around performance, coming from the same baseline (P27).

There was a consensus across seven participants (P4, P9, P12, P13, P17, P26 and P29) that technology is used by their firm to enhance customer relationship management. Senior Management participant P4 explained that their firm utilises a CRM system as part of their performance measurement system to maintain a priority focus on customers, product users and targeted market segments. Senior Management participant P9 explained that their firm utilises technology to measure and capture customer feedback and changes in customer preferences and have increased the frequency of which the data is captured, to measure the performance of customer relationship management. Participant P9 also mentioned that senior roles at their firm

are measured on the outcome of their performance for “customer volume retained” (P9). Middle+ Management participant P12 explained that technology is a “key component of ensuring we put the customer first” at their firm and explained that “technology is an enabler to ensuring supply chain hits it's targets including the perfect order” (P12). Middle+ Management participant P17 explained that firm measure supply chain KPIs pertaining to “DIFOT, quality of goods and returns policy, usage data report, variations to contract, implementation and maintenance of the NPC [National Product Catalogue], invoicing and pricing accuracy, and continuous improvement and innovation” (P17). Middle+ Management participant P26 explained that their firm use their performance measurement system to measure the customer’s adoption their products and measure product quality, delivery performance, customers won, and customers lost. Middle+ Management participant P29 explained that customer related metrics are considered as key metrics on the firm’s corporate scorecard which are deployed through business plans. Middle+ Management participant P13 explained that their firm uses their performance measurement system to measure supply chain metrics on their firm-wide performance scorecard “to drive the business” with customer related strategic targets including: “increase customer satisfaction” measured by “customer complaints”; “mandatory delivery time” measured by “warehouse delivery” and “transport service level”; and “high availability” measured by several types of availability service level metrics (P13). Participant P13’s firm also implemented customer-focused technology to improve customer service performance including RF technology, smart path picking processes, despatch management software, other logistics technology and demand management software.

Table 4.13 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 11a: Supply chain relationships and alignment with strategic customers*, using representative supporting data from the findings. Sensing, seizing, and transforming capabilities were discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 11a is provided in Chapter 5.

Table 4.13: Summary of dynamic capabilities and microfoundations associated with *Theme 11a: Supply chain relationships and alignment with strategic customers*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Sensing *sense and shape opportunities and threats*	Strategic supply chain sensing Customer orientation (Vijaya et al. 2019; Zhou & Li 2010) Customer relationship management (Barrales-Molina et al. 2014; Vanpoucke et al. 2014; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Monitoring internal developments (Sprafke et al. 2012)	• "to demonstrate whether we've met those [customer] SLA's or KPI's or not, that will be through regular reporting and account management" […] "we're constantly reviewing and assessing how we're performing" […] "Technology […] provides that evidence and takes a lot of the subjectiveness out of what we're reporting on" (P1) • [top management] reviews how customers are serviced (P3) • their firm utilises processes that enable their leadership team to keep focused on strategic objectives pertaining to customer relationship management to ensure that the firm's "customers and product users remain key priorities" (P4) • customer related strategic targets including: "increase customer satisfaction" measured by "customer complaints" (P13) • utilises technology to measure and capture customer feedback and have increased the frequency of which the data is captured, to measure the performance of customer relationship management (P9)
		Processes to identify changing customer needs (Teece 2009) Detect how customers are shifting (Teece 2009) Market monitoring • Customer needs (Khan et al. 2020)	• utilises technology to monitor changes in customer preferences (P9) • "Their [customers] sons and daughters are taking over the business now, and they want everything done on a computer" (P11). • "technology is a huge part of our industry, and it's growing" […] "technology does actually underpin a huge part of our relationship management" and that customers expect their firm to have "world class or market leading technology"; "those big business who are focused on corporate social responsibility, and compliance and governance, so they won't partner with other firms that don't or are not aligned with their values and performance expectations" (P1) • their firm train their customers "in the use of the products and their adoption is measured" and their firm also monitors product quality after the sale (P26)
		Customer-focused external environment monitoring External process sensing (Conboy et al. 2020)	• "we're constantly reviewing and assessing […] how we're keeping up with legislation and ensuring that we're compliant and meeting all the legislative frameworks that exist with NHDR and WorkCover, and other laws that exist at state level and federal level.(P1) • "technology can provide data and information to support the monitoring and management of cross firm performance" (P15) • "ensure no negative impact on the customer's budgets" (P17) • Their firm took the opportunity to install computers in their customer's stores, participant P11 stated: "okay, we'll put a computer in yours, and you can see our inventory" (P11). • their firm identifies how their customers can reduce inventory holdings and identify "effective ways to compete with e-commerce competitors" (P14)
Seizing *seize opportunities*	Customer relationship management (Barrales-Molina et al. 2014; Vanpoucke et al. 2014; Vijaya et al. 2019) Inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019)	Strategic customer relationship performance management Collaboration (Khan et al. 2020)	• "mutual trust and respect" are "built [with customers] through efforts on both sides to establish and maintain effective working relationships" to align priorities (P15) • "we'll have the account management side who will assist and take the lead on, periodical meetings [with customers], whether they're monthly or quarterly review meetings, which will include presentations with the various metrics and KPI's" (P1) • [top management] meet with major customers at least three or four times a year; "understanding strategy and aligning strategies and that, much of it is still very much face to face, and verbal communication" which participant P3 considers more effective (P3) • "Because my customers are scattered around the world, different communication tools are commonly used to keep in touch and discuss operation issues" (P19) • their firm has mastered inter-firm relationship management with customers through "the development, monitoring and management of agreed objectives" (P15)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
	Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019)		• working together to improve processes and technology requirements (P3, P15, P16, P20, P27)
Transforming *transform, reconfigure, and manage threats*	Strategic supply chain performance alignment Customer relationship management (Barrales-Molina et al. 2014; Vanpoucke et al. 2014; Vijaya et al. 2019) Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019)	Process integration with strategic customers enabled by technology Real-time process reconfiguration (Conboy et al. 2020)	• "uses technology that provides customers with real time information about deliveries and automates the proof of delivery storage and retrieval process" […] "With this technology we have been able to […] work on properly prioritising the needs of customers" (P15) • implementing an EDI program with one of their firm's big customers for the ordering process and to "help both businesses flow the product through their systems a lot better, rather than your traditional warehousing and that type of thing" (P3) • "we work on customer platforms, with [major customer] and [major customer], their supplier portals provide visibility of forward order plans and forecasting etc where we can bring that information into our planning tool" (P20) • "having common access to some of those systems and that data"; "the basis of how to manage or how to maintain relationships so that people have access to the same data, so they can have an open and honest discussion around performance, coming from the same baseline" (P27) • their firm uses reporting and collaboration technology that can be accessed by clients which provides a "level of visibility and transparency" (P1) • technology at their firm helps to drive "visibility and communication, from customer through distribution to planning and stock management" and "besides visibility it also supports better performance in range of areas" (P16)

4.2.2.7.2. *Theme 11b: Supply chain relationships and alignment with strategic suppliers*

Fourteen participants provided perceptions and insights regarding their firm's relationships with strategic suppliers, including seven Senior Management participants (P1, P3, P5, P6, P7, P8 and P11), and seven Middle+ Management participants (P15, P19, P20, P22, P24, P25 and P27). As identified in *Theme 2: Developing strategic supply chain strategies* in Section 4.2.1.2, there was a consensus across five of these participants (P3, P11, P19, P20 and P25) that their firms develop and incorporate supplier-focused supply chain strategies into their corporate strategy.

The participants' firms master cross-firm supplier relationship management and alignment with strategic suppliers through monitoring spend, monitoring supplier performance, improving supplier relationships, ensuring transparency with suppliers,

supplier development, supplier meetings, working together, and integrating processes and technology, in alignment with corporate strategy. There was a consensus across all these participants that technology plays a role in supporting supplier relationships. At the conclusion of this section, a summary of the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 11b: Supply chain relationships and alignment with strategic suppliers* is provided.

Senior Management participant P3 explained that their firm has mastered cross-firm supplier relationship management by visiting and meeting with their international suppliers "at least three or four times a year", regular review meetings, monitoring supplier performance and reviewing how their firm services their suppliers (P3). Meeting with suppliers is considered "very important" by participant P3 and this includes meeting with major suppliers on the phone monthly and having "full business review meetings" to ensure "absolute transparency" (P3). Participant P3 explained that their firm has contracts with big suppliers "with companies who are well and truly into the ASX top twenty, and they have very strong performance indicators" (P3). Even though participant P3 oversees the entire company, participant P3 spends most of his time managing the firm's supplier base. Their priority focus on suppliers is driven by their firm's global entity to be a "value-add distribution business in a technology space" and this strategy primarily relies on purchasing and selling products that requires their firm to provide technical services support (P3):

> I spend most of my time managing our supplier base, the guys we get product off to distribute in the market. I go overseas, at least three or four times a year. I meet the major ones on the phone, at least, you know, monthly. We have full business review meetings. Absolute transparency with those guys. So, we use, essentially the same sort of processes to manage them, as what we would do a customer here (P3).

Participant P3 is heavily involved in managing relationships with his firm's suppliers and explains:

> My rationale behind that is if I don't manage the customers [suppliers] that supply us the goods, I don't have the goods to sell. So, I've got to make sure their needs are met, because if they [suppliers] pull their distribution line, which happens in our business, the effect on your business is much more than if you lost an account [end user customer], locally (P3).

Senior Management participant P5 explained that their firm has a sophisticated approach to collaborating with suppliers through contract management and category management and has contracts with suppliers and contractors. Participant P5 stated: "We've got a very strong commitment to category management. We've invested quite heavily in that area, and we've got a sourcing department as well." (P5). Participant P5 explained that their firm's contract managers monitor contractor performance, have meetings with contractors, collaborate with their suppliers regarding category management and work with suppliers and contractors to improve their firm's sourcing and tendering process efficiency to expedite meeting the needs of their internal customers. Participant P5 also explained that their firm collaborated with suppliers to setup tendering templates to automate the sourcing process using SAP Ariba to expedite evaluation and negotiation processes, to allow their firm to better meet the needs of their internal customers. Participant P5 elaborated that their firm can:

> more efficiently go to market, using the Ariba template, and then our suppliers that tender, are able to use an automated system to respond to the tender by simply answering very straightforward questions, and then filling in the pricing schedules that go with that, and then, again working together through setting up the templates, you can actually expedite the evaluation process and get to your final negotiation process much more quickly (P5).

Participant P5 explained that their firm has a "much more sophisticated contract management system that's properly integrated across all areas of our business" using SAP Ariba sourcing which allows their firm to "run efficient sourcing activity" (P5). The Ariba system allows their firm to "monitor performance of contractors" and "set up meetings" with contractors, which is complemented by their category management approach and collaboration between suppliers and the firm's contract managers (P5). Their firm also uses "a product called Commerce Automation" which generates transactional efficiencies from dealing with their suppliers and allows contract management personnel to "have visibility and transparency of those transactions, so they can monitor spend" (P5). Their firm's contract managers use analytics to measure contractor performance and can negotiate "early payment terms" with their contractors (P5). Through the systems and by working with suppliers, participant P5 explained that their firm can monitor goods delivery real-time, lower inventory levels, create sourcing efficiency for the internal customer, reduce maverick spend and achieve their

firms' multi-million-dollar supply chain cost savings target. Participant P5 explained that their firm's supply chain cost savings goal is ahead of schedule stating: "we've already achieved in excess of the target within 2020, late 2018, we'd already achieved the 2020 target on savings" (P5).

There was a consensus amongst two Senior Management participants P3 and P6 that whilst at their firm technology plays a role in managing supply chain relationships with suppliers, it is the individual relationship with the supplier that is more important. Senior Management participant P3 confirmed that at their firm technology plays a role in managing cross-firm relationships with suppliers "but by far, the most effective tool is to go and talk to them face to face, and meet them, at least two or three times a year" (P3). Participant P3 explained that their firm also uses email, their business intelligence tool, telephone, and video conferencing to communicate with suppliers and to get educated about their products before deciding whether to invest.

Similarly, Senior Management participant P6 explained that at their firm technology "certainly" plays a role through supplier performance measurement using Tableau software and emphasised that "supply chain transparency is a big job". Participant P6 cautioned: "Ultimately, it comes down to individual relationships, as I said, but if you've got the facts and the data then, that supports what you're doing" (P6). Hence technology supports supplier relationship management by being able to access facts and data regarding supplier performance. Similarly, Senior Management participant P7 confirmed that at their firm technology plays a role in managing cross-firm relationships with suppliers, but "only as far as dissemination of communication is involved […] as a communication tool" (P7). Participant P7 explained that their firm has mastered cross-firm supplier relationship management by using "leadership and then values, principles and behaviours" and objectives that are "clear to all" and by ensuring that "accountability is clear, very clear" (P7). Participant P7 emphasised that "principles" is the "prevalent factor" and includes "keeping business simple" and to not make the relationship "any more complex than it already is", and supporting good behaviours and "more importantly when those behaviours aren't met, there are consequences" (P7). Participant P7 explained that when all these conditions are met, their firm is more likely to "work together [with suppliers] on an integrated basis" (P7).

Senior Management participant P8 explained that their firm use strategic supply chain management to drive value. Participant P8 explained that he works with his firm's vendors that supply "everything from service maintenance through to consumables" to identify end-to-end supply chain opportunities to gain a competitive advantage (P8). Participant P8 explained that technology integration with suppliers has been a "pretty big challenge" but the aim is to achieve "high levels of integration and visibility" (P8).

Like Senior Management participant P3, Middle+ Management participant P15 also use similar strategies to manage relationships with suppliers and customers. Participant P15 reiterated that their firm has mastered inter-firm relationship management with suppliers by developing, monitoring, and managing agreed objectives; and build mutual trust and respect by establishing and maintaining effective working relationships to align priorities (P15). Participant P15 confirmed that at their firm technology plays a role in managing cross-firm relationships with suppliers by using real time information sharing to optimise supply chain performance.

Senior Management participant P11 explained that when their firm made a strategic decision to "outsource the commodity side" of manufacturing they established "specific partnerships and relationships" and identified what was required. Their firm's outsourcing strategy entailed establishing relationships with a minimum of two suppliers. Participant P11 stated: "we always have a minimum of two suppliers, we don't lock ourselves into one supplier only". This supply risk mitigation strategy allowed their firm to spread supply risk in case either of the suppliers closed or were taken over and anything changed, which allowed their firm to always have an alternative supply avenue. Participant P11 elaborated: "So, we pretty much had a dual-pronged attack, whereas what I purchased off you, I purchased off your neighbour as well, just to keep everybody honest" (P11). Participant P11 emphasised that their firm establishes supplier agreements that include specific terms regarding quality, delivery, and technology and establishes very good relationships with sole source suppliers. Participant P11 also emphasised the importance of identifying where the firm can continuously improve supplier relationships. Participant P11 also confirmed that at their firm technology plays a role in managing cross-firm relationships with suppliers. Their firm have been "able to make the big gains through the technology" including convincing their supplier in China to use freight technology which allowed their firm

to “see what was in the container” (P11). This software allows their salespeople “to allocate that product to a customer while it’s on the water” (P11).

Middle+ Management participant P19 confirmed that at their firm technology plays a role in managing cross-firm relationships with suppliers, and stated: “We do integrate some of our suppliers into our business platforms, primarily as EDI participants into our Oracle platform within the procure to pay space” (P19). Participant P19 also explained that their firm use “software programmes that give better and faster access to data” to measure supplier performance and conduct spend analysis and this is “now heavily used in our business” (P19).

Middle+ Management participant P20 explained that their firm has mastered inter-firm relationship management with their co-manufacturers stating: “we work with not only our own manufacturing facilities, but we do work with co-manufacturers and we feed into them our forecast and our integrated plan (P20). Participant P20 also explained that their firm works similarly with their global raw materials suppliers by sharing their forecasts and integrated plans. Technology also plays a role in managing cross-firm relationships with suppliers and their firm is “integrated in terms of SAP” with their “cross-firm partners” (20).

Middle+ Management participant P22 explained that their firm is in the process of building upon their supplier relationship management capability with plans to integrate suppliers into their firm’s planning process. Participant P22 explained that their firm has:

> very tight relationships with the suppliers but that tends to be from, how much, what new products am I going to buy off you at what rate, at what rebate are you going to give me; what DIFOT terms, and so on (P22).

Participant P22’s firm has implemented supplier development to work with suppliers to improve supplier performance so that both parties can achieve a better outcome. Participant P22 provided an example of a poor performing supplier and stated:

> our team went out and worked with that supplier and they understood their supply chain challenges and worked with them, then got a much better outcome; they understand what we're trying to achieve; we understand what they're trying to achieve and the challenges and you meet somewhere in the middle and you both share the

> gains of those process improvements and all of a sudden, you're getting the right product largely at the right time in the right packaging with the right labels that's flows better through the supply chain and also there is stock availability for better (P22).

Participant P22 indicated that supplier development enabled their firm to increase sales and customer satisfaction and achieve strategic objectives. Participant P22 emphasised that their firm's supply chain transformation stemmed from realising their supply chain function was operating more like a logistics function. Participant P22 stated: "Really you're missing half the picture if your supply chain is only focused on the logistics component, you're really missing half of the picture is what we've discovered" (P22). Participant P22 explained that their firm is building supply chain relationships and improving suppliers understanding of their firm's strategy in what the supplier must achieve to help their firm deliver their strategy. Participant P22 stated:

> it can't be underestimated the value you'll get out of that a good inter-firm relationship. It's a balanced relationship as well. It's not all about us. It's not all about them. Who's winning the most. It's about working together (P22).

Participant P22 also confirmed that at their firm technology plays a role in managing cross-firm relationships with suppliers through visibility of inbound orders from suppliers, analytics, and accurate measurement of supplier performance. Participant P22 explained that previously their firm's DIFOT measurement was inaccurate and "would get the suppliers offside when they went to the DIFOT meeting" (P22). Participant P22 explained that their firm completed a technology upgrade two years ago:

> We've upgraded a lot of our technology from the inbound so that we get more visibility, the supplier gets more visibility, it's easier for them to book in through the supply chain for the transport carriers and we kind of all know we're everything's at now. Absolutely, better technology that does more, to give everyone visibility, easy to access and use, where you can actually get analytics out of as well is very important for us. We've embarked on that journey two years ago and we started to put in a lot of that technology and we're starting to get the payback on it now. I'd absolutely say yes it has (P22).

Participant P22 emphasised that supplier-related master data "is very important" and "will become more and more important" and that their firm has "invested in data

analytics teams and they're getting that into the business units" as they have "a lot of big data" (P22). Participant P22 explained that their firm's technology platforms which integrate with their suppliers allows their firm to retrieve analytics and "see the improvements and get the actionable insights from that" (P22).

Middle+ Management participant P25 explained that their firm ensures that they pay their suppliers on time in relation to the payment terms that they promised. By paying their suppliers on time, participant P25 stated that their firm was able to use that as leverage in their negotiations to get a better commercial outcome. Participant P25 also explained that supplier performance KPIs are aligned with their firm's corporate strategy, and that they have their suppliers report their contract KPI performance to their firm and meet with their major suppliers on a regular basis:

> We do a constant catch up on the fortnight or monthly levels with our major suppliers and they report back to us whether they are meeting all the KPIs. And those KPIs entirely fit with the corporate strategy and company objectives. So, if there's any time that they reported the KPI – it's not on track, then we will make sure there's something being assigned to make sure then the next month's [KPIs] is on track (P25).

Participant P25 also confirmed that at their firm technology plays a role in managing cross-firm relationships with suppliers by using technology for procure to pay, tendering, supplier pre-qualification, leveraging volume buying powers and vendor consolidation. Participant P25 cautioned that "you've got to be very careful around the confidentiality" regarding sharing data due to confidentiality agreements in relation to supply chain procurement (P25). Participant P25 emphasised that the supplier relationship must be managed in person and cannot be replaced by technology. Participant P25 also stated: "We're utilising technology to pay our suppliers" (P25); and explained that their firm uses procure to pay technology to pay their suppliers 100% on time. Similarly, Middle+ Management participant P24 explained that their firm also use technology for tendering, contract management and compliance.

To reiterate, Middle+ Management participant P27 explained that their firm meets with "supply chain groups" including suppliers, customers and other supply chain parties to review supply chain performance "on a regular basis, and talk through issues […] with an intent to optimise performance of the supply chain" (P27). Participant P27 also confirmed that at their firm technology plays a role in managing supply chain

relationships with supply chain groups including suppliers, customers and other supply chain parties, to have common access to the same systems and data "so they can have an open and honest discussion around performance, coming from the same baseline" (P27).

Table 4.14 summarises the dynamic capabilities and microfoundations of dynamic capabilities associated with *Theme 11b: Supply chain relationships and alignment with strategic suppliers*, using representative supporting data from the findings. Sensing, seizing, and transforming capabilities were discovered in the data. Discussion regarding the dynamic capabilities and microfoundations of dynamic capabilities associated with Theme 11b is provided in Chapter 5.

Table 4.14: Summary of dynamic capabilities and microfoundations associated with *Theme 11b: Supply chain relationships and alignment with strategic suppliers*

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
Sensing *sense and shape opportunities and threats*	Strategic supply chain sensing Supplier orientation Supplier relationship management Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Monitoring internal developments (Sprafke et al. 2012)	• reviewing how their firm services their suppliers (P3) • "monitor spend" (P5) • conduct spend analysis (P19) • their firm has "invested in data analytics teams and they're getting that into the business units" as they have "a lot of big [supplier-related] data" (P22) • the importance of identifying where the firm can continuously improve supplier relationships (P11)
		Supplier-focused external environment monitoring Supplier performance measurement External process sensing (Conboy et al. 2020)	• monitoring supplier performance (P3) • use analytics to measure contractor performance and can negotiate "early payment terms" with their contractors; monitor goods delivery real-time (P5) • technology supports supplier relationship management by being able to access facts and data regarding supplier performance (P6) • identified supplier development requirements to improve supplier performance so that both parties can achieve a better outcome (P22)
Seizing *seize opportunities*	Supplier relationship management Inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) Strategy execution capability	Strategic supplier relationship performance management Collaboration (Khan et al. 2020)	• "I [top management] spend most of my time managing our supplier base, the guys we get product off to distribute in the market. […] We have full business review meetings. Absolute transparency with those guys" (P3) • "keeping business simple" and to not make the relationship "any more complex than it already is", and supporting good behaviours and "more importantly when those behaviours aren't met, there are consequences" (P7) • established "specific partnerships and relationships" with suppliers (P11) • "working together [with suppliers] through setting up the [SAP Ariba] templates, you can actually expedite the evaluation process and get to your final negotiation process much more quickly" (P5); collaboration between suppliers and the firm's contract managers (P5) • working together to improve processes and technology requirements (P5, P11, P15, P19) • their firm is building supply chain relationships and improving suppliers understanding of their firm's strategy in what the supplier must achieve to help their firm deliver their strategy (P22)

Disaggregated Dynamic Capabilities	Dynamic Capabilities	Microfoundations of dynamic capabilities	Representative Supporting Data
	(Harreld et al. 2007; Vijaya et al. 2019)		
Transforming *transform, reconfigure, and manage threats*	Strategic supply chain performance alignment Supplier relationship management Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019) Managing threats (Teece 2009)	Process integration with strategic suppliers enabled by technology Real-time process reconfiguration (Conboy et al. 2020) Technological upgradation (Khan et al. 2020)	• "We do integrate some of our suppliers into our business platforms, primarily as EDI participants into our Oracle platform within the procure to pay space" (P19) • "more efficiently go to market, using the Ariba template, and then our suppliers that tender, are able to use an automated system to respond to the tender" (P5) • real time information sharing to optimise supply chain performance (P15) • convincing their supplier in China to use freight technology which allowed their firm to "see what was in the container" (P11). This software allows their salespeople "to allocate that product to a customer while it's on the water" (P11). • "We've upgraded a lot of our technology from the inbound so that we get more visibility, the supplier gets more visibility, it's easier for them to book in through the supply chain for the transport carriers and we kind of all know we're everything's at now. Absolutely, better technology that does more, to give everyone visibility, easy to access and use, where you can actually get analytics out of as well is very important for us" (P22).
		Managing strategic supply chain threats to competitive advantages	• "if I don't manage the customers [suppliers] that supply us the goods, I don't have the goods to sell" (P3) • supply risk mitigation strategy allowed their firm to spread supply risk in case either of the suppliers closed or were taken over and anything changed, which allowed their firm to always have an alternative. Participant P11 elaborated: "So, we pretty much had a dual-pronged attack, whereas what I purchased off you, I purchased off your neighbour as well, just to keep everybody honest" (P11).

4.2.2.8. Research Issue 2: Dynamic Capabilities and Microfoundations

Appendix J lists the sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 2: Corporate Strategy Cascading – to perform as required* per key theme. Discussion regarding the dynamic capabilities and the microfoundations of dynamic capabilities associated with Research Issue 2 is provided in Chapter 5.

4.3. Summary

This chapter presented the findings and results of the qualitative data analysis of the data collected from research participants in response to the open-ended in-depth questions and presented the analysis as relevant to the research issues.

The findings of the NVivo-assisted qualitative data analysis as relevant to *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus* was presented through the analysis of four key themes, including three themes that emerged from the data. The sensing, seizing, and transforming dynamic capabilities and

microfoundations of dynamic capabilities associated with Research Issue 1 and respective themes were identified, summarised, and tabulated.

The findings of the NVivo-assisted qualitative data analysis as relevant to *Research Issue 2: Corporate Strategy Cascading – to perform as required* was presented through the analysis of seven key themes, including one theme that emerged from the data. The sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with Research Issue 2 and respective themes were identified, summarised, and tabulated.

The next chapter provides a discussion regarding the findings presented in Chapter 4, within the context of the literature review and presents conclusions.

CHAPTER 5: DISCUSSION AND CONCLUSIONS

5.1. Introduction

Chapter 5 represents the fifth and final chapter in the thesis. Chapter 1 provided a background to the research and an overview of the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* relevant to this research study. Gaps in the literature were highlighted and the research problem was introduced. The relevance of the Dynamic Capabilities Theory was discussed, and the research issues investigated by this research study were introduced. The scope of the research and delimitations were outlined, and the research methodology was summarised. The structure of the thesis was outlined, and key terms and concepts were defined.

Chapter 2 presented a detailed review of the literature related to the two major domains and the Dynamic Capabilities Theory. *Strategic performance management* was defined, and its importance discussed; the link between strategic management, corporate strategy, and *strategic performance management* were explored; and corporate strategy cascading, strategy cascading approaches and the role of strategic performance management systems were explored and discussed. *Supply chain performance management* was defined, and its importance discussed; the link between strategic management, corporate strategy, supply chain and *supply chain performance management* were explored, as were the links with corporate strategy cascading.

The most significant research gap identified from the literature review is the lack of research focusing on corporate strategy cascading at top performing B2B firms in Australia, whether supply chain is a key element in corporate strategy and its link to firm performance and supply chain performance. This research gap led to the development of the research problem: *How do executives at top performing B2B firms in Australia form and cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains?*

The Dynamic Capabilities Theory was also defined and explored in Chapter 2, as well as its relevance to the two major domains. The theoretical framework that underpins this research study was presented. This research identified that the two major domains

were ideal management constructs and complementary fields of enquiry to identify whether dynamic capabilities and microfoundations of dynamic capabilities were found in organisational contexts relevant to these domains. The research problem was dissected into two research issues to explore the sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with corporate strategy formulation – *a strategic supply chain focus* and corporate strategy cascading – *to perform as required*.

Chapter 3 provided a detailed account of the research design and methodology guiding and shaping the research. The selection of the interpretivism paradigm and the exploratory purpose of the research were justified and an outline of the stages of the research design was provided. The exploratory qualitative in-depth research strategy was justified, and an outline of the research methodology used to select and recruit research participants and to collect and analyse the data was provided. The quality and trustworthiness of the methodology was addressed, and an outline of ethical considerations was provided.

Chapter 4 presented the findings and results of the qualitative data analysis in relation to the two research issues, using the interpretivism research paradigm to explore the perceptions, opinions, and perspectives of the research participants in response to the open-ended in-depth questions. The findings of the qualitative data analysis as relevant to *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus* were presented, including an analysis of four key themes. The sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with Research Issue 1 and respective themes were identified, summarised, and tabulated. The findings of the qualitative data analysis as relevant to *Research Issue 2: Corporate Strategy Cascading – to perform as required* were presented, including an analysis of seven key themes. The sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with Research Issue 2 and respective themes were identified, summarised, and tabulated.

5.1.1. Objective of the chapter

The objective of this chapter is to discuss the findings presented in Chapter 4, within the context of the literature review and to present conclusions. Section 5.1.2 summarises the contribution to knowledge made by this research study. Section 5.2 presents a discussion and conclusions about the two research issues and Section 5.3 presents conclusions about the research problem. Section 5.4 explains the implications for theory and Section 5.5 explains the implications for practice. Section 5.6 outlines the limitations of this research, Section 5.7 provides directions for future research and Section 5.8 summarises the chapter. **Figure 5.1** depicts the fifth and final chapter and its eight sections.

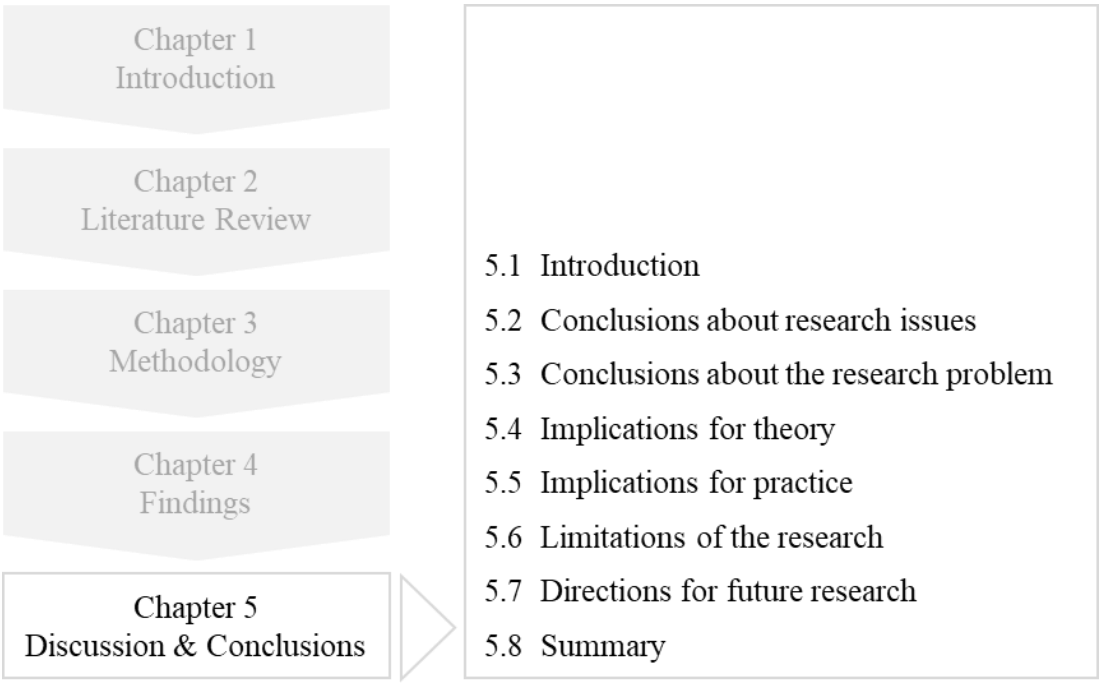

Figure 5.1: Outline of Chapter 5

5.1.2. Summary of contribution to knowledge

This section outlines the contribution to knowledge made by this research study. Contributions to knowledge made by this research study have been classified as either advance in, an addition to, or confirmation of current knowledge. **Table 5.1** outlines and classifies the contributions to knowledge achieved by this research study.

Table 5.1: Summary of contribution to knowledge by this research study

Output	Contribution to knowledge
Relationships between Key Themes (Figure 5.2)	Advance
Revised Theoretical Framework (Figure 5.3)	Advance
Contribution to *Supply Chain Performance Management* body of knowledge (Section 5.4.2)	Advance
Contribution to *Strategic Performance Management* body of knowledge (Section 5.4.3)	Advance
Key components of Corporate Strategy Cascading (Figure 5.4)	Advance
Definition for Corporate Strategy Cascading (Section 5.4.3)	Advance
Contribution to Dynamic Capabilities Theory (Section 5.4.4)	Advance, Addition, Confirmation
New term and definition for Strategic Supply Chain Performance Management (Section 5.4.5)	Advance
Sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus (Appendix I)	Advance, Addition, Confirmation
Sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with Research Issue 2: Corporate Strategy Cascading – to perform as required (Appendix J)	Advance, Addition, Confirmation
Transforming dynamic capabilities and microfoundations associated with Strategic Supply Chain Performance Transformation (Appendix K)	Advance, Addition, Confirmation
Contribution to practice: Outline of Strategic Supply Chain Performance Management Framework (Table 5.5)	Advance
Contribution to practice: Strategic Supply Chain Performance Management Framework Cycle (Figure 5.5)	Advance

5.2. Conclusions about research issues

This section discusses the findings pertaining to each research issue per key theme in the context of the literature reviewed in Chapter 2, summarises conclusions and classifies the contribution to knowledge by this research.

5.2.1. Conclusions about *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus*

This section provides a discussion and presents conclusions about *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus.* Research Issue 1 explored the perceptions, opinions, and perspectives of research participants regarding the strategic supply chain considerations of B2B firms during corporate strategy formulation, to ensure that the firm performs as required within its strategic supply chains. The sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with this process are identified.

Research Issue 1 also addressed the first half of the research problem: *How do executives at top performing B2B firms in Australia* ***form*** *[…]* ***corporate strategy*** *[…] to ensure that the firm performs as required within its strategic supply chains?*

Twenty of the 30 research participants provided perceptions and insights in relation to Research Issue 1 which enabled good representation in the analysis to draw meaning and conclusions for discussion. Remaining participants discussed alignment to corporate strategy (Section 5.2.2) including two participants (P2 and P7) who had a different perception and explained that supply chain is not considered in their firm's corporate strategy; and believed that it would be more relevant for a firm that specialises in supply chain as their primary business. While this research study is not case study research, the following observations are still interesting. The findings illustrated that three participants from product transportation firms consider supply chain in their corporate strategy and this example would align with the perceptions provided by the two participants (P2 and P7). However the findings also illustrated that 17 participants from firms from four other business types (including industrial services (two participants), product distribution (five participants), product manufacturing (six participants) and product supply (four participants)), also incorporate strategic supply chain considerations into corporate strategy. The findings indicated that incorporation of strategic supply chain considerations into corporate strategy was relevant across all five business types (20 participants), medium size firms (all three participants), large size firms (17 participants), and across six industry sectors including industrials (seven participants), consumer discretionary (three participants), health care (four participants), materials (four participants), consumer staples (one participant) and utilities (one participant). This research discovery disproved the perception that incorporation of strategic supply chain considerations into corporate strategy was more relevant to firms that specialise in supply chain as their primary business. The contribution to knowledge of the four key themes within Research Issue 1 is classified in the following sub-sections.

5.2.1.1. *Strategic supply chain as a key element in corporate strategy*

With regards to strategic supply chain considerations of B2B firms during corporate strategy formulation, the extant literature can be characterised as scarce. The corporate strategy is the highest-level overall strategy for a firm and the strategic management

process is used to formulate the corporate strategy through top management (Adler 2018; Omalaja & Eruola 2011; Zamecnik & Rajnoha 2015). The strategic performance management process supports the strategic management process and is used to develop and continually refine the corporate strategy and its objectives and to make the strategy measurable (de Waal 2013). Corporate strategy development is the first step in the strategic performance management process (de Waal 2013). However, a gap was discovered in the extant literature reviewed regarding *strategic performance management* with no references in relation to supply chain during corporate strategy formulation. Similarly, Gonzalez-Loureiro et al. (2015, p. 174) discovered that very little research focused on supply chain management as a key element in corporate strategy, in the 3402 articles they reviewed from top supply chain management journals. In addition, no references to corporate strategy formulation with a strategic supply chain focus at top performing B2B firms in Australia were present in the extant literature reviewed. The research findings provided across Themes 1 to 4 from 20 research participants, confirmed that executives incorporate strategic supply chain elements into corporate strategy to gain and sustain significant supply chain competitive advantages. Research Issue 1 includes *Theme 1: Strategic management-supply chain strategic alignment, Theme 2: Developing strategic supply chain strategies, Theme 3: Strategic supply chain configuration decision-making and planning* and *Theme 4: Strategic supply chain performance objectives.* The findings confirmed that strategic supply chain considerations are a key element in corporate strategy including supply chain management. The findings in Themes 1 to 4 also challenged stage one of de Waal's (2013) three-staged approach to establish a strategic performance management system. Stage one includes designing a strategic management model however it excluded consideration of strategic supply chains and top management's supply chain-related role. The findings about Research Issue 1 represent an advance in knowledge.

5.2.1.2. *Theme 1: Strategic management-supply chain strategic alignment*

Theme 1 emerged from the data regarding the linkage and alignment between strategic management and supply chain, during corporate strategy formulation to ensure that the B2B firm gains and sustains significant supply chain competitive advantages. Strategic management-supply chain strategic alignment is a relevant concept across Themes 1 to 4 from the findings provided by 20 participants. However, 12 participants provided

greater insights regarding activities utilised by their firms to establish strategic management-supply chain linkages and alignment during corporate strategy formulation.

A strategic supply chain focus. The extant literature identified an under-researched area regarding the linkage and alignment between corporate strategy formulation and supply chain management and requirements (Gonzalez-Loureiro et al. 2015; Hofmann 2010; Sandberg & Abrahamsson 2010; Wagner & Kemmerling 2014). The findings indicated that linkages and alignment between strategic management and supply chain is established during corporate strategy formulation and are considered an advance in knowledge.

Seizing. Participants perceived that alignment at their firms is established between top management and key personnel during corporate strategy formulation to enable informed decision-making regarding strategic supply chain requirements and to incorporate strategic supply chain opportunities, strategies, solutions, and improvement programs into corporate strategy. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'strategic planning to seize strategic supply chain opportunities and determine supply chain strategic objectives', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, were identified as ***seizing dynamic capabilities*** which this research study named 'corporate strategy formulation with a strategic supply chain focus' and 'strategic supply chain decision-making', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Top management. The extant literature identified that little is known about top management's supply chain-related role (Sandberg & Abrahamsson 2010; Wagner & Kemmerling 2014). The findings indicated links between top management and strategic supply chain considerations during corporate strategy formulation and are considered an advance in knowledge.

Sensing. Participants believed that top management at their firms recognised and acknowledged the importance and value of the supply chain and the importance of

incorporating strategic supply chain considerations into corporate strategy. Top management recognised supply chain as a critical component of the firm and incorporated strategic supply chain management into corporate strategy because they realised that it would drive value. These findings were identified by this research study as ***sensing microfoundations*** of dynamic capabilities which were named 'top management detecting the importance and value of the supply chain and of incorporating strategic supply chain considerations into corporate strategy', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, were identified as ***sensing dynamic capabilities*** which this research study named 'top management sensing importance of strategic supply chains', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Sensing. Participants believed that top management at their firms recognised the importance of having someone in top management that understands the supply chain and the business capabilities, to incorporate strategic supply chain considerations into corporate strategy. Participants believed that top management at their firms were reliant on key personnel who were across the markets, supply chains and global trends, who could collect and analyse this information during corporate strategy formulation. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities including monitoring of market trends (Khan et al. 2020), interpreting available information (Khan et al. 2020; Teece 2009), and identifying how the firm will be impacted (Teece 2009), which are considered an addition to current knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding ***sensing dynamic capabilities*** referred to as entrepreneurial (Teece 2009), which are considered an addition to current knowledge.

Key supply chain-focused personnel. The involvement of key supply chain-focused personnel in corporate strategy formulation is an under-researched area. Researchers observed that supply chain management personnel are rarely involved in strategic level planning at the highest level of the organisation (Deshpande 2012; Hofmann 2010; Hwang 2010) and this was still found to be a gap in the extant supply chain literature

reviewed. The extant literature identified that little is known about supply chain executives' role in top management teams (Sandberg & Abrahamsson 2010; Wagner & Kemmerling 2014). The following research findings closed this gap.

Sensing. Participants believed that during corporate strategy formulation, key supply chain-focused personnel were called upon to demonstrate to top management how the supply chain can drive customer growth, customer satisfaction, and supplier and innovation initiatives. These findings were identified by this research study as ***sensing microfoundations*** of dynamic capabilities which were named 'detect how supply chain can drive customer growth and satisfaction, and supplier and innovation initiatives', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, were identified as ***sensing dynamic capabilities*** which this research study named 'strategic supply chain sensing', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings also showed similarity with the literature reviewed regarding ***sensing dynamic capabilities*** referred to as customer orientation (Vijaya et al. 2019; Zhou & Li 2010), which are considered an addition to current knowledge.

Seizing. Participants indicated that key supply chain-focused personnel, especially within leadership or executive positions, played an important role with top management during corporate strategy formulation to incorporate strategic supply chain opportunities, decisions, and supply chain projects and initiatives, and these findings are considered an advance in knowledge. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'seizing strategic supply chain opportunities while maintaining commitment of key supply chain-focused stakeholders', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as building loyalty and commitment by effectively communicating (Teece 2009), and are considered an addition to current knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding

seizing dynamic capabilities including top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) and stakeholder management (Sodhi 2015), which are considered an addition to current knowledge.

Transforming. Participants believed that at their firms the involvement of key supply chain-focused personnel during corporate strategy formulation is vital, including participation in strategic planning workshops to develop and align strategic business and strategic supply chain objectives. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'combining strategic management and strategic supply chain skills and knowledge' and 'supply chain knowledge transfer to top management', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The transforming microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding ***transforming dynamic capabilities*** referred to as knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007), and are considered an addition to current knowledge.

Teece (2009, p. 37) argued that to sustain transforming dynamic capabilities, top management need to be 'closer to new technologies, the customer, and the market' through a decentralised strategic decision-making and organisational approach, which are transforming microfoundations of dynamic capabilities. This decentralised approach is illustrated in the findings through key supply chain-focused personnel bringing top management closer to strategic supply chain elements. These ***transforming microfoundations*** of dynamic capabilities were named by that research study as 'decentralised strategic decision-making to bring top management closer to strategic supply chain elements' and are considered an addition to current knowledge.

Supply chain strategy. Within the extant literature reviewed regarding *strategic performance management,* no references to 'supply chain strategy' were discovered, including where it fits in relation to the corporate strategy. However, the findings indicated that the involvement of key supply chain-focused personnel during corporate strategy formulation enabled the initial alignment of supply chain requirements to corporate strategy, from which enabled the formulation of an aligned-supply chain

strategy post development of the corporate strategy, and are considered an advance in knowledge.

Transforming. Participants perceived that at their firms it was important to align the supply chain strategy with the corporate strategy but that this alignment commence during corporate strategy formulation with the involvement of key supply chain-focused personnel, which is considered an advance in knowledge. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'corporate strategy-pre-supply chain strategy alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Transforming. The findings in Theme 1 indicated that strategic supply chain considerations are incorporated into corporate strategy because of the linkage and alignment between strategic management and the supply chain requirements of the firm and the link with key supply chain-focused personnel. These findings were identified by this research study as ***transforming dynamic capabilities*** which were named 'strategic management-supply chain strategic alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Conclusions. This research study concludes that sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy formulation with a strategic supply chain focus, by bringing top management closer to strategic supply chain considerations through the involvement of key supply chain-focused personnel to ensure that the B2B firm gains and sustains significant supply chain competitive advantages, and is considered an advance in knowledge. This research study concludes that the capabilities listed in **Appendix I**, represent the sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus* and *Theme 1: Strategic management-supply chain strategic alignment.*

5.2.1.3. *Theme 2: Developing strategic supply chain strategies*

Theme 2 emerged from the data from 13 participants regarding the development of supply chain strategies during corporate strategy formulation. The extant literature identified that the supply chain performance management process is used to monitor and improve the effectiveness of supply chain strategies to achieve a competitive advantage (Ramezankhani et al. 2018; Roh et al. 2014; Stefanovic 2014). However, there were no references in the extant literature reviewed regarding the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* and supply chain management in relation to developing and incorporating supply chain strategies into corporate strategy.

Seizing. Participants indicated that customer-focussed supply chain strategies and supplier-focussed supply chain strategies are incorporated into corporate strategy as strategic supply chain opportunities to ensure that the firm gains and sustains significant supply chain competitive advantages, which is considered an advance in knowledge. These findings were identified by this research study as ***seizing dynamic capabilities*** which were named 'strategic supply chain strategies development for corporate strategy' and 'strategic supply chain decision-making' (also identified in Theme 1), and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Customer-focussed supply chain strategies. The extant literature reviewed regarding *strategic performance management* demonstrated that this domain applied a customer focus (Adler 2011; Chau 2008; de Waal & Kourtit 2013; Franco-Santos et al. 2012; Marr 2006), however, there were no references in relation to developing and incorporating customer-focussed supply chain strategies into corporate strategy. The extant literature reviewed regarding *supply chain performance management* and supply chain management demonstrated a strong customer focus (Al-Shboul et al. 2017; García-Alcaraz et al. 2019; Stefanovic 2014), however, there were also no references in relation to developing and incorporating customer-focussed supply chain strategies into corporate strategy.

Seizing. Participants indicated that customer-focussed supply chain strategies are developed and incorporated into corporate strategy for the benefit of improving the

competitiveness of the customer and the firm. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities and were named 'developing customer-focused supply chain strategies to seize competitive opportunities', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Sensing. Participants believed that at their firms it was important that their firms developed customer-focussed strategies that put the customer first, identify the right products for their market, source the right products for their customers, ensure that the right products are present in the market for business growth, predict customer needs, dictate new products and customer trends in the market, and that improve the customer's competitiveness and reduces their costs. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities including monitoring market trends and customer needs (Khan et al. 2020), sensing opportunities for new products (Khan et al. 2020; Teece 2009), predictive capability (Danneels 2008; Oliver & Holzinger 2008; Vijaya et al. 2019) and shaping opportunities and shaping markets (Teece 2009), which are considered an addition to current knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, supported ***sensing dynamic capabilities*** in the literature reviewed including entrepreneurial (Teece 2009), customer orientation (Vijaya et al. 2019; Zhou & Li 2010) and product portfolio management (Eggers 2012; Vijaya et al. 2019), which are considered an addition to current knowledge.

Supplier-focussed supply chain strategies. The extant literature reviewed regarding *strategic performance management* demonstrated that this domain largely ignored the role of suppliers (de Waal 2013) and there were no references in relation to developing and incorporating supplier-focussed supply chain strategies into corporate strategy. The strategic performance management process uses the Balanced Scorecard, however de Waal (2013, p. 143) argued that the Balanced Scorecard is mostly criticised due to its 'imbalance in the number of stakeholders that is accounted for' and that 'suppliers are absent from the scorecard'. This could indicate the cause of the customer/supplier-focus imbalance in the *strategic performance management* domain. The extant literature reviewed regarding *supply chain performance management* and supply chain management demonstrated a strong supplier focus (Cook et al. 2011; Gandhi et al.

2017; Gorane & Kant 2017; Wankhade & Kundu 2018), however, there were also no references in relation to developing and incorporating supplier-focussed supply chain strategies into corporate strategy.

Seizing. Participants indicated that supplier-focussed supply chain strategies are developed and incorporated into corporate strategy for the benefit of improving the competitiveness of the firm and the supply chain from supplier to customer, which is considered an advance in knowledge. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'developing supplier-focused supply chain strategies to seize competitive opportunities', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. Participants perceived that it was important that their firms developed supplier-focused strategies that included product decisions that impact margins, spend decisions and strategies in relation to supply risk, supplier selection, relationships, and agreements, and collaboration requirements with supply chain stakeholders. The findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities including strategic planning related to finding strategic partners (Khan et al. 2020), collaboration (Khan et al. 2020), and selecting decision-making protocols to avoiding decision errors (Teece 2009), which are considered an addition to current knowledge. These findings showed similarity with the literature reviewed regarding ***seizing dynamic capabilities*** referred to as inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019), and are considered an addition to current knowledge.

Sensing. Receiving education from suppliers regarding products before making strategic decisions about revenue-generating products was also considered important in the findings due to the significant impact on revenue performance. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities including learning (Khan et al. 2020; Teece 2009), processes to tap supplier innovation (Teece 2009) and interpreting available information (Khan et al. 2020; Teece 2009), which are considered an addition to current knowledge. These findings also showed similarity with the literature reviewed regarding ***sensing dynamic capabilities*** referred to as entrepreneurial (Teece 2009), and are considered

an addition to current knowledge. Sensing supply chain risks and threats during corporate strategy formulation was also important to participants in relation to supply from suppliers to ensure that their firms were able to serve customers and leverage supply risk across multiple suppliers. These findings were identified by this research study as ***sensing microfoundations*** of dynamic capabilities which were named 'sensing strategic supply chain threats to competitive advantages', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***sensing dynamic capabilities*** which were named 'supplier orientation', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, also showed similarity with the literature reviewed regarding ***sensing dynamic capabilities*** referred to as sensing threats (Teece 2009), and are considered an addition to current knowledge.

Dynamic capabilities common to developing customer-focussed and supplier-focussed supply chain strategies.

Sensing. The findings regarding sensing the needs strategic customers and strategic suppliers were identified by this research study as ***sensing dynamic capabilities*** which were named 'strategic supply chain sensing' (also identified in Theme 1, further supporting an advance in knowledge).

Seizing. Participants indicated that customer-focussed supply chain strategies and supplier-focussed supply chain strategies are developed with the involvement of the key supply chain-focused personnel with top management during corporate strategy formulation. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'seizing strategic supply chain opportunities while maintaining commitment of key supply chain-focused stakeholders' (also identified in Theme 1, further supporting an advance in knowledge). These findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as building loyalty and commitment by effectively communicating (Teece 2009), and are considered an

addition to current knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding ***seizing dynamic capabilities*** including top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) and stakeholder management (Sodhi 2015), which are considered an addition to current knowledge.

Transforming. Participants indicated that the involvement of key supply chain-focused personnel enabled top management to get closer to the supply chain requirements of customer-facing and supplier-facing supply chains during corporate strategy formulation. These findings were identified as ***transforming microfoundations*** of dynamic capabilities which this research study named 'decentralised strategic decision-making to bring top management closer to strategic supply chain elements' (also identified in Theme 1, further supporting an addition to current knowledge) and 'combining strategic management and strategic supply chain skills and knowledge' and 'supply chain knowledge transfer to top management' (also identified in Theme 1, further supporting an advance in knowledge). The transforming microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***transforming dynamic capabilities*** which were named 'strategic management-supply chain strategic alignment' (also identified in Theme 1, further supporting an advance in knowledge).

Conclusions. This research study concludes that sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy formulation with a strategic supply chain focus, by incorporating strategic supply chain strategies as strategic supply chain opportunities to ensure that the firm gains and sustains significant supply chain competitive advantages, and is considered an advance in knowledge. This research study concludes that the dynamic capabilities and microfoundations of dynamic capabilities listed in **Appendix I** represent the dynamic capabilities and microfoundations of dynamic capabilities that are associated with *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus* and *Theme 2: Developing strategic supply chain strategies.*

5.2.1.4. *Theme 3: Strategic supply chain configuration decision-making and planning*

Theme 3 emerged from the data from 16 participants in relation to strategic supply chain configuration decision-making and planning during corporate strategy formulation. The extant literature identified that the supply chain is largely known for its complexity due to supply chain configuration, processes, and systems, and variation in product and service offerings (Cohen & Roussel 2013; García-Alcaraz et al. 2019; Wankhade & Kundu 2018). Sabri et al. (2017, p. 36) argue that decisions regarding supply chain configuration impacts the effectiveness and efficiency of supply chain performance and impacts 'almost all supply chain decisions'. However, there were no references in the extant literature reviewed in relation to incorporating supply chain configuration decisions into corporate strategy.

Seizing. Participants indicated that strategic supply chain configuration decisions and plans were identified as strategic supply chain opportunities that are incorporated into corporate strategy to gain and sustain significant supply chain competitive advantages and achieve superior supply chain performance, which is considered an advance in knowledge. These findings were identified by this research study as ***seizing dynamic capabilities*** which were named 'strategic supply chain configuration decision-making and planning', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. Strategic supply chain configuration decisions at the participant's firms perceived as important to participants pertained to supply chain network, sourcing, suppliers, inventory, manufacturing, customers and enterprise-wide IT, decision support systems, supply chain technology and supply chain data integration technology. Simply put, the findings can be grouped into supply chain network configuration decisions and technology configuration decisions and are incorporated into corporate strategy for the purpose of improving firm performance and supply chain performance.

Supply chain network configuration decisions.

Supply chain network decisions and planning (including manufacturing).

Seizing. Sabri et al. (2017, p. 52) argue that the merging of supply chain configuration and supply chain performance 'streams of research is not full employed'. However,

the findings in this research study identified that executives make strategic supply chain configuration decisions to gain and sustain competitive advantage and superior performance. Participants perceived that their firms made supply chain network decisions to better serve the needs of customers, grow the firm, control competitive advantage, and reduce overall cost of goods. Participants perceived that at their firms decisions were made about locating global inventory closer to the point of demand (customer), supplying manufactured product to global customers, in-house versus outsourcing manufacturing, offshore manufacturing, and resourcing decisions regarding how to operate more competitively. Decisions about in-house manufacturing versus outsourcing manufacturing were also considered important as these decisions impacted supply chain configuration and required making decisions about offshore manufacturers. It was also considered important to identify the products the firm could manufacture better than any other firm and to manufacture those products in-house. Participants also believed that at their firms it was important to make supply chain network decisions that would achieve efficiency gains and increase productivity through rationalisation of warehouses, supply chain services, suppliers, products, and business centres. The above findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities, which were named 'strategic planning to seize strategic supply chain network opportunities', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Decision implementation insights.

Transforming. Additional insights that were discovered in the findings (**Table 4.5** in Section 4.2.1.3) which also helped to answer the research problem, pertained to the implementation of strategic supply chain configuration decisions utilising transforming capabilities. These findings have been categorised by this research study as strategic supply chain performance transformation activities. While not part of corporate strategy formulation, this research study acknowledges the implementation of these supply chain network decisions as explained by the participants at their firms. The findings regarding participants' perceptions regarding moving inventory closer to the point of demand and reconfiguring resources to operate competitively due to deciding to manufacture niche products in-house, have been identified by this research

study as ***transforming microfoundations*** of dynamic capabilities, which were named 'maintain competitiveness through reconfiguring supply chain resources', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings showed similarity with the literature reviewed regarding ***transforming microfoundations*** of dynamic capabilities referred to as resource management (Sirmon & Hitt 2009; Vijaya et al. 2019), and are considered an addition to current knowledge. Also, the participants' perceptions regarding rationalisation of warehouses, supply chain services, suppliers, products, and business centres and the outsourcing of in-house operations, have been identified by this research study as ***transforming microfoundations*** of dynamic capabilities, which were named 'maintain competitiveness through supply chain rationalisation' and 'reconfiguring operations from in-house to outsourcing', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The transforming microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***transforming dynamic capabilities*** which were named 'strategic supply chain reconfiguration' and 'strategic supply chain performance transformation', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The transforming microfoundations of dynamic capabilities identified in these findings, supported ***transforming dynamic capabilities*** in the literature reviewed including outsourcing capability (Scherrer-Rathje et al. 2014; Vijaya et al. 2019) and information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019), which are considered a confirmation of current knowledge.

Sourcing-related decisions and planning. Research findings supported the view in the literature reviewed that supply chain configuration decisions can include decisions about supplier selection, supplier location, local and global sourcing decisions, and the impact that suppliers have on creating value (Dharmapriya et al. 2016; Sabri et al. 2017), and are considered a confirmation of current knowledge.

Sensing. During corporate strategy formulation, participants perceived that at their firms it was important to monitor labour market trends, review alternative sourcing options to avoid barriers of entry into countries and review product alternatives that generate higher revenues and profits. These findings were identified by this research

study as ***sensing microfoundations*** of dynamic capabilities which were named 'sensing strategic supply chain threats to competitive advantages' (also identified in Theme 2, further supporting an advance in knowledge). These findings also showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities including sensing threats (Teece 2009), monitoring market trends (Khan et al. 2020), learning (Khan et al. 2020; Teece 2009) and interpreting available information (Khan et al. 2020; Teece 2009), and are considered an addition to current knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding ***sensing dynamic capabilities*** referred to as entrepreneurial (Teece 2009), and are considered an addition to current knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, were also identified as ***sensing dynamic capabilities*** which this research study named 'strategic supply chain sensing' (also identified in Themes 1 and 2, further supporting an advance in knowledge).

Seizing. Participants believed that their firms incorporate decisions about strategic spend solutions, international sourcing of revenue-generating products, global and local supplier selection strategies and decisions, procurement strategy, freight strategies and supply chain stakeholder management requirements. These findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities including strategic planning related to finding strategic partners (Khan et al. 2020), collaboration (Khan et al. 2020) and revenue architecture decision-making (Teece 2009), and are considered an addition to current knowledge.

Technology configuration decisions.

Research findings supported the view in the literature reviewed that supply chain configuration decisions can include decisions about information technology, information flow, information systems, information sharing, information-sharing tools, and collaboration between supply chain members (Sabri et al. 2017), and are considered a confirmation of current knowledge. Technology configuration decisions in the findings related to technology requirements within-firm and cross-firm.

Enterprise-wide IT and decision support systems decisions and planning.

Sensing. Participants perceived that enterprise-wide IT architecture, particularly ERP systems, and decision support systems at their firms are important for measuring and monitoring enterprise performance, driving business improvement, improving cross-functional data sharing, improving support for maintenance and operations, tracking product performance and movement; and having ready access to important information, making the correct decisions in a timely manner; and by using an integrated system that pulls information from a central source. These findings showed similarity with the literature reviewed regarding ***sensing dynamic capabilities*** including technology scanning (Khan et al. 2020) and learning (Khan et al. 2020; Teece 2009), and are considered an addition to current knowledge. Sensing threats and sensing technology requirements that can help manage threats using ERP systems was also important to participants, which were identified as ***sensing microfoundations*** of dynamic capabilities this research study named 'sensing strategic supply chain threats to competitive advantages' (also identified in Theme 2, further supporting an advance in knowledge). The sensing microfoundations of dynamic capabilities identified in the findings, were identified as ***sensing dynamic capabilities*** which this research study named 'strategic supply chain sensing' (also identified in Themes 1 and 2, further supporting an advance in knowledge).

Seizing. Decisions incorporated into corporate strategy included enterprise-wide IT architecture requirements, ERP replacement and selection, technology outsourcing, cloud-based collaborative systems, optimisation tools, maintenance planning systems, financial systems, and business intelligence tools. These findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as technology architecture (Teece 2009), and are considered an addition to current knowledge.

Decision implementation insights.

Transforming. Additional insights that were discovered in the findings (**Table 4.5** in Section 4.2.1.3) which also helped to answer the research problem, pertained to the implementation of strategic supply chain configuration decisions utilising transforming capabilities. These findings were categorised by this research study as

strategic supply chain performance transformation activities. While not part of corporate strategy formulation, this research study acknowledges the implementation of these technology decisions as explained by the participants at their firms. Participants perceived that their firms managed firm growth by upgrading technology to systems with greater technological capability and scalability, collaboration capability, access flexibility and lower operating costs. These findings supported ***transforming microfoundations*** of dynamic capabilities in the literature reviewed including technological upgradation (Khan et al. 2020) and reconfiguring assets to cope with firm growth (Kareem & Alameer 2019; Khan et al. 2020; Suddaby et al. 2019; Teece 2009), and are considered a confirmation of current knowledge. Participants believed that their firms stayed ahead of the competition by deploying new methods and processes supported by technology, by introducing new technological ways to collaborate online to improve cross-functional data sharing and relationships, and by changing from in-house technology to outsourced IT infrastructure. These findings supported ***transforming microfoundations*** of dynamic capabilities in the literature reviewed including reconfiguring capabilities to cope with technology change (Kareem & Alameer 2019; Khan et al. 2020; Suddaby et al. 2019; Teece 2009) and best practices adaptation using new business practices and new work methods (Khan et al. 2020), and are considered a confirmation of current knowledge. These findings were also identified as ***transforming microfoundations*** of dynamic capabilities this research study named 'reconfiguring operations from in-house to outsourcing' (also identified above, further supporting an advance in knowledge). The transforming microfoundations of dynamic capabilities identified in these findings, were identified as ***transforming dynamic capabilities*** which this research study named 'strategic supply chain performance transformation' (also identified above, further supporting an advance in knowledge). The transforming microfoundations of dynamic capabilities identified in these findings, supported ***transforming dynamic capabilities*** in the literature reviewed referred to as information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019), and are considered a confirmation of current knowledge.

Supply chain technology decisions and planning (including data integration).

Sensing. Participants believed that at their firms it was important to meet customer market expectations to have world class technology and to improve online reporting and collaboration options for customers, improve customer service and supply chain relationships with customers, demonstrate chain of responsibility obligations, share product data online with trading partners, and integrate data sharing processes with major customers. This required sensing technology requirements to improve how their firms could better operate in strategic supply chains. Technology that can broaden the suite of services offered by the firm was also considered important, as well as sensing the supply chain technology requirements of different markets, global and local, which can change based on market maturity. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities including technology scanning of customer needs and technological developments (Khan et al. 2020), detecting how customers are shifting (Teece 2009), sensing emergent technology threats (Khan et al. 2020; Patrício et al. 2019; Suddaby et al. 2019; Teece 2009; Vijaya et al. 2019), sensing opportunities for new services (Khan et al. 2020; Teece 2009) and processes to identify target market segments (Teece 2009), and are considered an addition to current knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, were identified as ***sensing dynamic capabilities*** which this research study named 'strategic supply chain sensing' (also identified in Themes 1 and 2, further supporting an advance in knowledge). These findings also showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as customer orientation (Vijaya et al. 2019; Zhou & Li 2010), and are considered an addition to current knowledge.

Min and Zhou (cited in Sabri et al. 2017, p. 42) take a systems approach to supply chain configuration with the view that entities within the supply chain are interconnected through processes 'with the main goal of increasing the operational efficiency, profitability and collaborative competitive advantage among the supply chain members'. The *supply chain performance management* related supply chain configuration decisions identified in the findings supported this view in the literature and is considered a confirmation of current knowledge.

Seizing. Participants believed that their firms selected technology that generated efficiency gains, cost savings, increased supply chain visibility and transparency, provided proof of product delivery, tracked customer orders, enhanced supply chain demand planning, and improved product flows for both customer and supplier. Participants indicated that the decisions incorporated into corporate strategy included decisions about market leading technology, IT architecture, EDI, cloud-based systems with supply chain collaboration and reporting capability, logistics technology, contract management technology, sourcing technology, freight technology, and selection decisions regarding global distributors and partners with large online platforms. It was also considered important that the business case for technology justified the investment and that the expected benefits be realised in the near term. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities and were named 'strategic planning to seize supply chain technology opportunities', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings were also identified as ***seizing microfoundations*** of dynamic capabilities in the literature including selecting the technology architecture (Teece 2009), strategic planning related to finding strategic partners (Khan et al. 2020), and collaboration (Khan et al. 2020), and are considered a confirmation of current knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, supported ***seizing dynamic capabilities*** in the literature reviewed including information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019) and inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019), and are considered a confirmation of current knowledge.

Decision implementation insights.

Transforming. Additional insights that were discovered in the findings (**Table 4.5** in Section 4.2.1.3) which also helped to answer the research problem, pertained to the implementation of strategic supply chain configuration decisions utilising transforming capabilities. As mentioned above, these findings have been categorised by this research study as strategic supply chain performance transformation activities. While not part of corporate strategy formulation, this research study acknowledges the implementation of supply chain technology decisions as explained by the participants

at their firms. Participants perceived that their firms persuaded suppliers and customers to use new technology which increased supply chain visibility of information, which required reconfiguring capabilities to integrate supply chain processes. These findings were identified as ***transforming microfoundations*** of dynamic capabilities which this research study named 'reconfiguring strategic supply chain capabilities to cope with technology change' and 'improving strategic supply chain practices', and due to no relevant references in the literature reviewed, are considered an advance in knowledge. The transforming microfoundations of dynamic capabilities identified in the findings, were identified as ***transforming dynamic capabilities*** which this research study named 'strategic supply chain performance transformation' (also identified above, further supporting an advance in knowledge).

Dynamic capabilities common to supply chain network configuration and technology configuration decision-making. Based on the findings reported above in relation to strategic supply chain configuration decision-making and planning, the following common capabilities where identified.

Seizing. Participants indicated that strategic supply chain configuration decision-making and planning is conducted with the involvement of the key supply chain-focused personnel with top management during corporate strategy formulation. These findings were identified as ***seizing microfoundations*** of dynamic capabilities which this research study named 'seizing strategic supply chain opportunities while maintaining commitment of key supply chain-focused stakeholders' (also identified in Themes 1 and 2, further supporting an advance in knowledge). These findings also showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as building loyalty and commitment by effectively communicating (Teece 2009), and are considered an addition to current knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding ***seizing dynamic capabilities*** including top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) and stakeholder management (Sodhi 2015), which are considered an addition to current knowledge.

Transforming. Participants indicated that the involvement of the key supply chain-focused personnel enabled top management to get closer to supply chain configuration requirements during corporate strategy formulation. These findings were identified as ***transforming microfoundations*** of dynamic capabilities which this research study named 'decentralised strategic decision-making to bring top management closer to strategic supply chain elements' (also identified in Themes 1 and 2, further supporting an addition to current knowledge) and 'combining strategic management and strategic supply chain skills and knowledge' and 'supply chain knowledge transfer to top management' (also identified in Themes 1 and 2, further supporting an advance in knowledge). The transforming microfoundations of dynamic capabilities identified in the findings, were identified as ***transforming dynamic capabilities*** which this research study named 'strategic management-supply chain strategic alignment' (also identified in Themes 1 and 2, further supporting an advance in knowledge). The transforming microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***transforming dynamic capabilities*** which this research study named 'strategic supply chain performance transformation decision-making', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Conclusions. This research study concludes that sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy formulation with a strategic supply chain focus, by incorporating strategic supply chain configuration decisions and plans as strategic supply chain opportunities to gain and sustain significant supply chain competitive advantages and achieve superior supply chain performance, and is considered an advance in knowledge. This research study concludes that the capabilities listed in **Appendix I**, represent the sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus* and *Theme 3: Strategic supply chain configuration decision-making and planning.* This research study concludes that the capabilities listed in **Appendix K** represent the transforming dynamic capabilities and microfoundations of dynamic capabilities associated with implementing strategic supply chain reconfiguration decisions to transform the supply chain network and

technological capabilities, which are not associated with Research Issue 1 but are associated with corporate strategy execution.

5.2.1.5. *Theme 4: Strategic supply chain performance objectives*

Theme 4 was established from the question pertaining to the incorporation of strategic supply chain performance objectives into corporate strategy. The extant literature reviewed argued that improving supply chain performance is key to gaining a competitive advantage (Cohen & Roussel 2013; Cook et al. 2011; Deshpande 2012; Gandhi et al. 2017; García-Alcaraz et al. 2019; Gorane & Kant 2017; Lambert 2014; Ramezankhani et al. 2018; Stefanovic 2014; Wagner & Kemmerling 2014; Wankhade & Kundu 2018). However, there were no references in the extant literature reviewed in relation to incorporating strategic supply chain performance objectives into corporate strategy. The findings of this research study, from 16 participants, indicated that strategic supply chain performance objectives are incorporated into corporate strategy to ensure that the firm performs as required within its strategic supply chains and to gain and sustain competitive advantage, which is considered an advance in knowledge. In contrast, three other participants provided alternative perspectives including two participants (P2 and P8) who believed that their firm's corporate strategy does not incorporate strategic supply chain performance objectives, and one participant (P21) believed that supply chain performance objectives are aligned with their firm's overall business strategy. One participant (P2) reiterated that it would be more relevant for a firm that specialises in supply chain as their primary business.

Sensing. Participants indicated there is a link between sensing technology developments and identifying strategic supply chain performance opportunities. To incorporate strategic supply chain performance objectives into corporate strategy, participants believed that at their firms it was important to understand how shifts in technology can impact and improve product quality and market performance; and how technology can enable the firm to be leaner, more customer focused, have streamlined operations, reduce running costs and achieve perfect order targets. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as scanning technological developments (Khan et al. 2020), and are considered an addition to current knowledge. These findings were also identified as ***sensing microfoundations*** of dynamic capabilities which this research

study named ‘detecting strategic supply chain performance opportunities’, and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings showed similarity with the literature reviewed regarding ***sensing dynamic capabilities*** referred to as customer orientation (Vijaya et al. 2019; Zhou & Li 2010), and are considered an addition to current knowledge.

Participants perceived that top management at their firms involved middle managers to identify how to remove costs from the supply chain to achieve corporate financial targets, which enabled the development of strategic supply chain performance objectives. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as idea generation and brainstorming sessions (Khan et al. 2020), which are considered an addition to current knowledge. The participants perceived that the development of strategic supply chain performance objectives was enabled by continually reviewing the firm’s service offering to ensure a competitive advantage, by monitoring contractor performance and by identifying how other decisions impact end-to-end supply chain performance. These findings were identified by this research study as ***sensing microfoundations*** of dynamic capabilities which this research study named ‘monitoring and sensing threats to strategic supply chain performance’, and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as sensing threats to services (Khan et al. 2020; Patrício et al. 2019; Suddaby et al. 2019; Teece 2009; Vijaya et al. 2019), which are considered an addition to current knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***sensing dynamic capabilities*** which were named ‘strategic supply chain performance sensing’, and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding ***sensing dynamic capabilities*** referred to as entrepreneurial (Teece 2009), which are considered an addition to current knowledge.

Seizing. The literature reviewed identified that inadequate strategic planning was one of the barriers for *supply chain performance management* (Katiyar, cited in Wankhade & Kundu 2018, p. 224). However, the findings in this research study identified that strategic planning of strategic supply chain performance objectives is conducted during corporate strategy formulation and is considered an advance in knowledge. Participants believed that at their firms the development of strategic supply chain performance objectives for corporate strategy are developed with the involvement of key supply chain-focused personnel and top management. Participants reiterated how vital supply chain support was to the firm's success. Participants perceived that their firms were concerned about maintaining an enviable reputation in the market, being held in the highest regard, ensuring that their customers get what they need, understanding the real cost of business, ensuring they stick to what their firms are good at, meeting the supply chain performance expectations of the global head office, achieving continuous improvement each year, process efficiency, ensuring accountability for performance, achieving performance standards that enable non-compete arrangements with customers and reducing costs. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'seizing strategic supply chain performance opportunities while maintaining commitment of key supply chain-focused stakeholders', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings also showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as building loyalty and commitment by effectively communicating (Teece 2009), and are considered an addition to current knowledge.

Participants believed that at their firms it was important to incorporate end-to-end supply chain (from supplier to customer) strategic supply chain performance objectives into corporate strategy regarding supplier performance, product quality, product performance, right product sourcing, product recall, product flow, service quality, supply chain metrics, inventory service levels, perfect orders, lead times, supply chain cost reduction (including freight, manufacturing and facilities) and outsourcing. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'strategic planning and decision-making about strategic supply chain performance objectives', and due to no

relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, were identified as ***seizing dynamic capabilities*** which this research study named 'strategic supply chain performance objectives development for corporate strategy' and 'strategic supply chain performance management', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The findings showed similarity with the literature reviewed regarding ***seizing dynamic capabilities*** including top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) and stakeholder management (Sodhi 2015), which are considered an addition to current knowledge.

Transforming. Researchers suggested that *supply chain performance management* lacks top management dedication (Katiyar, cited in Wankhade & Kundu 2018, p. 224). However, the findings of this research study do not support this view but indicated that top management are involved in *supply chain performance management* from a strategic planning perspective, which is considered an advance in knowledge. Participants believed that top management at their firms involved key supply chain-focused personnel in the development of strategic supply chain performance objectives for corporate strategy, to understand the end-to-end supply chain impact of decisions, to involve key supply chain-focused personnel in decision-making, and to integrate top management in strategic supply chain management activities. These findings were identified as ***transforming microfoundations*** of dynamic capabilities which this research study named 'decentralised strategic decision-making to bring top management closer to strategic supply chain elements' (also identified in Themes 1, 2 and 3, further supporting an addition to current knowledge) and 'combining strategic management and strategic supply chain skills and knowledge' and 'supply chain knowledge transfer to top management' (also identified in Themes 1, 2 and 3, further supporting an advance in knowledge). The transforming microfoundations of dynamic capabilities identified in these findings, were identified by this research study as ***transforming dynamic capabilities*** which were named 'strategic management-supply chain strategic alignment' (also identified in Themes 1, 2 and 3, further supporting an advance in knowledge). The transforming microfoundations of dynamic capabilities identified in these findings, also supported ***transforming dynamic capabilities*** in the

literature reviewed referred to as knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007), and are considered a confirmation of current knowledge.

Conclusions. This research study concludes that sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy formulation with a strategic supply chain focus, by incorporating strategic supply chain performance objectives to ensure that the firm performs as required within its strategic supply chains and to gain and sustain competitive advantage, and is considered an advance in knowledge. This research study concludes that the capabilities listed in **Appendix I**, represent the sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus* and *Theme 4: Strategic supply chain performance objectives.*

5.2.2. Conclusions about *Research Issue 2: Corporate Strategy Cascading - to perform as required*

This section provides conclusions about *Research Issue 2: Corporate Strategy Cascading – to perform as required*. Research Issue 2 explored the perceptions, opinions, and perspectives of research participants regarding how corporate strategy cascading is conducted at their B2B firms to ensure that the firm performs as required within its strategic supply chains. The sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with this process are identified. Research Issue 2 also addresses the second half of the research problem: *How do executives at top performing B2B firms in Australia […]* ***cascade corporate strategy firm-wide*** *to ensure that the firm performs as required within its strategic supply chains?*

Within the extant literature reviewed regarding *strategic performance management* and *supply chain performance management* there was limited empirical research on corporate strategy cascading, as well as strategy cascading approaches suitable for successful corporate strategy cascading. Schlickel (2013) also reported that little research is available on strategy cascading and Akhtar (2018) identified that there is little research regarding the success of *strategic performance management*

implementation or critical success factors. The research findings provided across Themes 5 to 11 from 30 research participants confirmed how executives cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains, as well as alignment with strategic supply chain partners. All 30 participants provided perceptions and insights in relation to Research Issue 2, including 20 participants from firms with a corporate strategy with a strategic supply chain focus, which enabled good representation in the analysis to draw meaning and conclusions for discussion. The overall research findings about Research Issue 2 represent an advance in knowledge. The contribution to knowledge of the seven key themes within Research Issue 2 is discussed in the following sub-sections.

5.2.2.1. *Theme 5: Corporate strategy rollout*

All 30 participants provided insights regarding corporate strategy deployment and alignment through corporate strategy rollout (Theme 5), strategic performance alignment (Theme 6) and/or by using strategic performance management system technology (Theme 7). Theme 5 was established from the question pertaining to cascading and rolling out corporate strategy firm-wide, to ensure that the firm performs as required within its strategic supply chains, with insights provided from 14 participants. With little known about approaches suitable for successful corporate strategy cascading, the corporate strategy rollout process implemented by the research participants' firms sheds light on this strategy cascading approach in addition to identifying the dynamic capabilities and their microfoundations associated with this process.

Seizing. Participants perceived that corporate strategy rollout at their firms is led by active top management to illustrate their commitment to, and the importance they place on the strategy, commencing with communication across the firm to start the cascade. The leadership element of these findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as building loyalty and commitment by demonstrating leadership (Teece 2009) and are considered an addition to current knowledge. Participants indicated that a broad approach is used to communicate the corporate strategy firm-wide, including conducting a roadshow, communicating across all divisions and using central communications tools, to communicate strategic objectives, values, purpose, risks and benefits, to gain

commitment and accountability across the firm to each individual. Research findings support the view in the literature reviewed that accountabilities are deployed across the firm using the strategic performance management process (de Waal 2013). The communication elements of these findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities including building loyalty and commitment by effectively communicating (Teece 2009) and communicating goals (Sprafke et al. 2012; Teece 2009), which are considered an addition to current knowledge.

Participants perceived that rollout of the corporate strategy at their firms included middle management reviewing corporate strategy objectives with top management; identifying core competencies and the requirements that each area of the business needs to achieve; as well as middle management developing business plans, objectives, budgets, and metrics to ensure that the objectives of the department and the firm are met. The reliance on middle management as identified in the findings to ensure that the operational level has correctly implemented strategic decisions reinforces the literature reviewed (Camman et al. 2017). Participants indicated that the corporate strategy rollout is enabled by their performance management system with business objectives and goals entered in the system. Participants indicated that middle managers involve employees to help identify, adopt, and achieve the metrics and use this approach to inform employees about the corporate strategy. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'developing business plans, objectives, budgets, and metrics to deliver corporate strategy to seize opportunities', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding ***seizing dynamic capabilities*** referred to as seizing opportunities while maintaining commitment of key stakeholders (Suddaby et al. 2019), and are considered a confirmation of current knowledge.

The seizing microfoundations of dynamic capabilities identified in the findings were identified by this research study as ***seizing dynamic capabilities*** which were named 'corporate strategy cascading via deployment' and 'corporate strategy deployment

with a strategic supply chain focus', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The findings also supported ***seizing dynamic capabilities*** in the literature reviewed including strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) and stakeholder management (Sodhi 2015), and are considered a confirmation of current knowledge.

Transforming. Participants perceived that their firms rolled out and cascaded corporate strategy top-down through the management team per business unit, then down through each division using business plans, then down to each department head who continue the cascade through actionable objectives down to each employee into individual role plans. Participants believed that at their firms it was important to align the business plans, objectives, budgets, metrics, and employees to corporate strategy, to align with the firm's required core competencies, key results areas, cost expectations and strategic objectives. The transforming microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***transforming dynamic capabilities*** which were named 'corporate strategy cascading via strategic alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. In addition, the findings provided no indication that sensing dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy rollout.

Conclusions. This research study concludes that seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy cascading using a corporate strategy rollout process to perform as required within strategic supply chains and is considered an advance in knowledge. This research study concludes that sensing dynamic capabilities and microfoundations of dynamic capabilities are not associated with corporate strategy rollout, which is considered an advance in knowledge. This research study concludes that the capabilities listed in **Appendix J**, represent the seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 2: Corporate Strategy Cascading – to perform as required* and *Theme 5: Corporate strategy rollout.*

5.2.2.2. *Theme 6: Strategic performance alignment*

All 30 participants provided insights regarding corporate strategy deployment and alignment through corporate strategy rollout (Theme 5), strategic performance alignment (Theme 6) and/or by using strategic performance management system technology (Theme 7). Theme 6 was established from the question pertaining to alignment of performance to corporate strategy, to ensure that the firm performs as required within its strategic supply chains, with insights provided by 29 participants. With little known about approaches suitable for successful corporate strategy cascading, the strategic performance alignment process implemented by the research participants' firms sheds light on this strategy cascading approach in addition to identifying the dynamic capabilities and their microfoundations associated with this process.

Seizing. Participants perceived that the corporate strategy cascade at their firms includes a process by which corporate strategy KPIs are rolled out and cascaded down across the firm. Where firms were part of global entities, the participants perceived that the cascade starts from the global head office, where KPIs are rolled out to subsidiaries or to top management in Australia, including the break out of global metrics into relevant business metrics, and then rolled out within the firm in Australia. Participants believed that at their firms, relevant KPIs are cascaded down from management level to the next management level and throughout departments into team KPIs and individual KPIs. Participants believed that the KPI rollout includes ensuring KPIs are relevant for managers, teams, and individuals. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were supported and referred to in the literature reviewed as translating strategic KPIs into operational metrics to guide actions (Conboy et al. 2020), and are considered a confirmation of current knowledge. Participants perceived that changes in their firm's approach to organisational performance, including reducing and simplifying strategic metrics and including more non-financial metrics, has allowed staff to understand how the metrics make sense to the corporate strategy and that performance is not just about financial metrics. These findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as changing

enterprise procedures to seize opportunities (Teece 2009), and are considered an addition to current knowledge.

Participants indicated that processes are used at their firms to govern the organisational performance process including ensuring that the performance scorecard relates to the corporate strategy; that key metrics span across specific performance categories; that managers have their performance measurement plans in place first prior to plans for direct reports to maintain the alignment of objectives to the corporate strategy; that similar metrics are used across the firm; that performance calls to leaders are led by top management; and that the same business metrics are used as performance objectives for employees to ensure alignment between strategic and operational metrics. These findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as governance (Teece 2009), and are considered an addition to current knowledge.

The seizing microfoundations of dynamic capabilities identified in the findings were identified by this research study as ***seizing dynamic capabilities*** which were named 'corporate strategy cascading via deployment' (also identified in Theme 5, further supporting an advance in knowledge). The findings also supported ***seizing dynamic capabilities*** in the literature reviewed including strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019), performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) and metrics management (Hanson et al. 2011; Vijaya et al. 2019), and are considered a confirmation of current knowledge.

Transforming. In the literature reviewed, no links were identified between corporate strategy cascading and *supply chain performance management*, and a lack of appropriate implementation was identified as one of the barriers for *supply chain performance management* (Katiyar, cited in Wankhade & Kundu 2018, p. 224). However, the findings in this research study linked corporate strategy cascading and *supply chain performance management* and illustrated implementation of *supply chain performance management* through the development, cascade, and strategic alignment of supply chain KPIs and the supply chain strategy, which is considered a contribution to knowledge. This research study identified that during strategic performance alignment as part of corporate strategy cascading, end-to-end supply chain KPIs are

aligned with corporate strategy. Participants perceived that at their firms, strategic performance alignment to corporate strategy is achieved from board level to employee level, by using firm-wide performance scorecards; aligning financial and non-financial KPIs across the firm; aligning business objectives, strategic supply chain performance objectives and goals; using a small set of strategic KPIs; aligning supply chain strategy and supply chain costs to corporate strategy; and by including supply chain KPIs on the board performance dashboard. Where firms were part of global entities, participants believed that strategic performance alignment is achieved between the global entity and the entity in Australia through the alignment of KPIs, approval of local supply chain metrics, and by setting tailored supply chain goals for global teams. On the supplier-facing-side, participants perceived that their firms aligned KPIs pertaining to managing the performance of contractors, product quality, suppliers, and supplier lead times. Operationally, participants believed that their firms aligned KPIs pertaining to managing the performance of safety, cash, profit, revenue growth, international revenue and sales growth, expenditure, return on investment, operating costs, supply chain costs, inventory levels, stock turns, warehousing, freight, transport and people. On the customer-facing-side, participants believed that their firms aligned KPIs pertaining to managing the performance of DIFOT, customer satisfaction, customer service levels, perfect orders, and sales. These findings contribute knowledge to the strategic performance management process as the extant literature reviewed regarding *strategic performance management* excluded discussion regarding supply chain performance alignment to corporate strategy.

The findings regarding alignment of supply chain strategy to corporate strategy were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named ‘supply chain strategy alignment to corporate strategy’, and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The findings also indicated that strategic performance alignment was achieved at the firms of 18 participants whose firms have a corporate strategy with a strategic supply chain focus. These findings have been identified by this research study as ***transforming microfoundations*** of dynamic capabilities, which were named ‘strategic performance alignment of corporate strategy with a strategic supply chain focus’, and due to no relevant references in the extant dynamic capabilities literature reviewed, and are considered an advance in knowledge.

The transforming microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***transforming dynamic capabilities*** which were named 'corporate strategy cascading via strategic performance alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. In addition, the findings provided no indication that sensing dynamic capabilities and microfoundations of dynamic capabilities are associated with strategic performance alignment.

The findings in Theme 6 challenged stages two and three of de Waal's (2013) three-staged approach to establish a strategic performance management system. Stage two includes designing a strategic reporting model however it does not consider strategic supply chain performance objectives and metrics. It also encourages use of Kaplan and Norton's Balanced Scorecard however research findings did not support this. The research findings supported use of a firm-wide performance scorecard that also includes supplier-facing and customer-facing KPIs, which would prevent a customer-only focused scorecard for which the Balanced Scorecard is criticised. Stage three includes designing a performance-driven behavioural model however it excludes the performance-driven benefits of supply chain strategy alignment as identified by this research study.

Conclusions. This research study concludes that seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy cascading using strategic performance alignment to perform as required within strategic supply chains and is considered an advance in knowledge. This research study concludes that sensing dynamic capabilities and microfoundations of dynamic capabilities are not associated with strategic performance alignment, which is considered an advance in knowledge. This research study concludes that the capabilities listed in **Appendix J**, represent the seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 2: Corporate Strategy Cascading – to perform as required* and *Theme 6: Strategic performance alignment.*

5.2.2.3. *Theme 7: Strategic performance management system technology*

All 30 participants provided insights regarding corporate strategy deployment and alignment through corporate strategy rollout (Theme 5), strategic performance alignment (Theme 6) and/or by using strategic performance management system technology (Theme 7). Theme 7 was established from the question pertaining to using performance management and measurement system technology to deploy and align with corporate strategy, to ensure that the firm performs as required within its strategic supply chains, with insights provided by 22 participants. With little known about approaches suitable for successful corporate strategy cascading, the use of strategic performance management system technology by the research participants' firms sheds light on this strategy cascading approach in addition to identifying the dynamic capabilities and their microfoundations associated with this process. Research findings supported the view in the literature reviewed that strategic performance management systems are used during corporate strategy implementation (Bento et al. 2014; Bisbe & Malagueño 2012; Franco-Santos et al. 2012; Srimai et al. 2011), and are considered a confirmation of current knowledge. The term strategic performance management system technology has been shortened to performance system technology for brevity. Eight participants did not provide insights in relation to performance system technology in relation to corporate strategy deployment and alignment, which did not impact the analysis.

While researchers argued that strategic performance management systems should be used strategically align metrics (Bisbe & Malagueño 2012; Franco-Santos et al. 2012), there was limited literature addressing using these systems for corporate strategy cascading and the associated cascading of metrics and KPIs.

Transforming. Participants believed that their firms used their performance system technology (including business intelligence tools), to facilitate corporate strategy cascading, support the effectiveness of the cascade, define and align business and individual objectives and goals to corporate strategy, link budgeting to corporate strategy, select preloaded metrics for direct cascading, align metrics to corporate strategy and align people performance to corporate strategy. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'corporate strategy alignment using performance

system technology', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Participants perceived that their firms are upgrading their performance system technology to allow their firms to capture the performance information required; pull data a lot quicker and more efficiently and effectively from various data sources; improve alignment of metrics across the firm; provide meaningful performance information to make decisions; and to drive business improvement. These findings showed similarity with the literature reviewed regarding ***transforming microfoundations*** of dynamic capabilities referred to as technological upgradation (Khan et al. 2020), and are considered an addition to current knowledge. These findings were also identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'improving strategic performance management through upgrading performance system technology', and due to limited similarity in the literature reviewed, are considered an addition to current knowledge.

Participants believed that their firms are constantly training staff how to use their performance system technology to ensure that the technology capability is fully utilised, to create habits and discipline to use the system to drive improvement and to prevent expertise from residing in only a few people. Participants perceived that their firms are constantly developing leadership and implementing change management led by top management when upgrading performance system technology to ensure that benefits are gained. These findings showed similarity with the literature reviewed regarding ***transforming microfoundations*** of dynamic capabilities including knowledge integration through training of employees (Khan et al. 2020), knowledge management by learning (Teece 2009), and reconfiguring capabilities to cope with technology change (Kareem & Alameer 2019; Khan et al. 2020; Suddaby et al. 2019; Teece 2009), which are considered an addition to current knowledge.

The transforming microfoundations of dynamic capabilities identified in the findings, are identified by this research study as ***transforming dynamic capabilities*** which were named 'corporate strategy cascading via strategic performance management system technology', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The transforming

microfoundations of dynamic capabilities identified in the findings, also showed similarity with the literature reviewed regarding ***transforming dynamic capabilities*** including performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007), information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019), training and development (Azadegan et al. 2008; Vijaya et al. 2019) and knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007), and are considered an addition to current knowledge.

Seizing. Participants believed that their firms invest in upgraded performance system technology including ERPs and business intelligence tools to maintain software levels, improve alignment, have better systems to access performance information quicker and to cope with firm growth. These findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as seizing opportunities by mobilising significant financial resources (Suddaby et al. 2019), and are considered an addition to current knowledge. Participants believed that at their firms during the corporate strategy cascade, the performance system technology is used in combination with the manager communicating directly with their staff to help them to understand their role in delivering the strategy and the firm's plans. Participants perceived that communication via performance reports helped staff to understand their contribution to overall performance, and the use of video conferencing increased the impact and attention to progressing strategic objectives. These findings also showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as building loyalty and commitment by effectively communicating (Teece 2009), and are considered an addition to current knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding ***seizing dynamic capabilities*** including strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019), stakeholder management (Sodhi 2015) and performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007), and are considered an addition to current knowledge.

Sensing. Participants believed that their firms used their performance system technology to measure business KPIs, monitor and report firm performance and people performance, carry out performance reviews, monitor goods delivery, share

information, and monitor product sales performance, product lifecycle, supplier performance, market segments and customers. Participants believed that their firms rely on performance analysis and the insights from the analysis to be able to develop required actions. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as monitoring internal developments (Sprafke et al. 2012), and are considered an addition to current knowledge. Participants believed that their firms identified the need to upgrade performance system technology to improve visibility of firm performance within the supply chain, collect data real time, improve data analytics, access performance information quicker and automate measurement. These findings further strengthen the link between corporate strategy cascading and *supply chain performance management* and do not support the view that there is a lack of appropriate implementation of *supply chain performance management* (Katiyar, cited in Wankhade & Kundu 2018, p. 224), and are considered an advance in knowledge. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as scanning technological developments (Khan et al. 2020), and are considered an addition to current knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***sensing dynamic capabilities*** which were named 'firm and supply chain performance monitoring and reporting', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The findings also supported ***sensing dynamic capabilities*** in the literature reviewed referred to as information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019), and are considered a confirmation of current knowledge.

The findings in Theme 7 challenged stages one and two of de Waal's (2013) three-staged approach to establish a strategic performance management system. Stage one includes designing a strategic management model and stage two includes designing a strategic reporting model. Stage two also includes setting up the technology architecture for the strategic performance management system. However, the findings identified that executives upgrade their performance system technology to improve performance management, visibility, and alignment, therefore the setup of this technology could be addressed in stage one to ensure a successful corporate strategy cascade.

Conclusions. This research study concludes that transforming, seizing and sensing dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy cascading using strategic performance management system technology to perform as required within strategic supply chains, and is considered an advance in knowledge. This research study concludes that the capabilities listed in **Appendix J**, represent the sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 2: Corporate Strategy Cascading – to perform as required* and *Theme 7: Strategic performance management system technology*.

5.2.2.4. *Theme 8: Cross-functional relationships and alignment*

Theme 8 was established from the question pertaining to mastering infra-firm cross-functional relationship management, to ensure that the firm performs as required within its strategic supply chains, with insights provided by 21 participants. Nine participants did not provide insights in relation to cross-functional relationships which did not impact the analysis.

Transforming. Participants indicated that at their firms, cross-functional alignment between cross-functional teams (from supply chain, sales and marketing, operations, strategy, and procurement) and top management was achieved during corporate strategy formulation; and by top management participating on cross-functional management groups to examine at how customers and suppliers are being serviced due to their link with the firm's financial performance. These findings do not support the view in the literature reviewed that *supply chain performance management* lacks top management dedication or lacks appropriate implementation (Katiyar, cited in Wankhade & Kundu 2018, p. 224), and are considered an advance in knowledge. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'strategic management-cross-functional relationships and alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

The need for more research regarding how firms achieve cross-functional alignment (Cuthbertson & Piotrowicz 2011; Deshpande 2012) was identified in the literature, and

this research study has contributed to knowledge regarding cross-functional alignment. Participants perceived that at their firms, cross-functional relationship management and alignment was mastered to achieve firm performance objectives through leadership, collaboration, developing departmental and divisional business plans from a common set of high-level objectives, shared goals, common access to functions and information, and by helping business units to meet their objectives. Participants believed that at their firms, monthly cross-functional meetings provided a great way to build relationships and to understand what other business functions are doing; that it was essential for supply chain personnel to attend meetings with operational management; and that the supply chain function conduct monthly cross-functional meetings by inviting other business functions. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'cross-functional collaboration and alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Transforming and Seizing. Participants believed that at their firms, key personnel are assigned to help manage cross-functional relationships by using top performing individuals who are capable of removing interdepartmental barriers to ensure that tasks and projects are managed in an efficient and timely manner; by embedding champions across sites to share knowledge and insights and to link strategy and plans; and by embedding project managers in functions and by appointing suitable project sponsors to ensure that the right stakeholders get involved. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'cross-functional champions', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings also showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred as mobilising resources to seize opportunities (Khan et al. 2020; Teece 2007, 2009), and are considered an addition to current knowledge.

The findings in Theme 8 challenged stage three of de Waal's (2013) three-staged approach to establish a strategic performance management system. Stage three includes designing a performance-driven behavioural model however it excludes the

performance-driven benefits of cross-functional alignment as identified by this research study.

Transforming and Seizing. Participants believed that cross-functional processes at their firms are used to achieve the firm's performance objectives and require leadership from a top down perspective; maintaining values and behaviours consistent with strategic direction; stakeholder identification and engagement using project management methodologies; ensuring that a diverse range of stakeholders are involved; and the involvement of functions from across the firm to drive a balanced result that can be aligned with the corporate objectives. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'cross-functional process management', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings also showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities including building loyalty and commitment by demonstrating leadership and effectively communicating (Teece 2009), communicating goals (Sprafke et al. 2012; Teece 2009), and seizing opportunities while maintaining commitment of key stakeholders (Suddaby et al. 2019), and are considered an addition to current knowledge.

The above 'transforming' findings supported ***transforming microfoundations*** of dynamic capabilities in the literature reviewed referred to as combination skills and combination of know-how within the enterprise (Teece 2009), and are considered a confirmation of current knowledge. The transforming microfoundations of dynamic capabilities identified in the findings, are identified by this research study as ***transforming dynamic capabilities*** which were named 'cross-functional relationship management', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The transforming microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding ***transforming dynamic capabilities*** referred to as knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007), and are considered an addition to current knowledge.

Seizing. The seizing microfoundations of dynamic capabilities identified in the findings, were consistent with the literature reviewed regarding ***seizing dynamic capabilities*** including strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019), stakeholder management (Sodhi 2015), project and program management (Anand et al. 2009; Mosey 2005; Vijaya et al. 2019) and performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007), which are considered a confirmation of current knowledge.

Sensing. Interestingly, two participants (P24 and P30) who believed that improving collaboration at their firms would improve cross-functional relationships, both indicated that the cause of the collaboration issue was competing objectives. Another participant (P3) believed that distant/remote cross-functional relationships at their firms would improve during meetings by setting business rules around meeting etiquette to ensure that staff are listening and engaged. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as internal process sensing and identifying internal inefficiencies (Conboy et al. 2020), and similarity with the literature reviewed regarding ***sensing dynamic capabilities*** referred to as process management (Benner & Tushman 2015; Vijaya et al. 2019; Zollo & Winter 2002), and are considered an addition to current knowledge.

Role of technology. Participants believed that at their firms, technology played a role in enabling and supporting cross-functional relationships and a limited role in managing the relationships. Participants perceived that cross-functional teams at their firms utilised collaboration tools, video conferencing, teleconferencing, data sharing systems, communication apps and systems that provide an integrated cross-functional view, to enable and enhance cross-functional relationship management and overcome cross-functional challenges. Participants believed while technology supports cross-functional relationships, the relationship itself needs to be managed face to face. The findings identified that technology played a very important role in enabling the microfoundations of dynamic capabilities and dynamic capabilities of cross-functional relationship management. This research study classified the role of technology in Theme 8 to enable cross-functional relationships as ordinary capabilities and not dynamic capabilities as the technologies themselves are not rare, inimitable and non-

substitutable (Teece 2014; Vijaya et al. 2019), which is considered a confirmation of current knowledge.

Conclusions. This research study concludes that transforming and seizing dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy cascading using cross-functional relationships and alignment to perform as required within strategic supply chains and is considered an advance in knowledge. Interestingly, this research study also concludes that a combination of transforming and seizing microfoundations of dynamic capabilities are used to master cross-functional relationship management to achieve the firm's business objectives and supply chain performance objectives, which is considered an advance in knowledge. This research study concludes that sensing dynamic capabilities and microfoundations of dynamic capabilities are used to identify issues that require improvement in cross-functional relationships, which is considered an addition to current knowledge. This research study concludes that technology plays a very important role in enabling the microfoundations of dynamic capabilities and dynamic capabilities of cross-functional relationship management, but the technology itself are not dynamic capabilities, which is considered a confirmation of current knowledge. This research study concludes that the capabilities listed in **Appendix J**, represent the sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 2: Corporate Strategy Cascading – to perform as required* and *Theme 8: Cross-functional relationships and alignment.*

5.2.2.5. *Theme 9: People performance strategic alignment*

Theme 9 emerged from the data regarding the alignment of people performance to the corporate strategy, to ensure that the firm performs as required within its strategic supply chains. Twenty-two participants provided insights regarding the alignment of individual performance and/or team performance to the corporate strategy. With little known about approaches suitable for successful corporate strategy cascading, the strategic alignment of people performance implemented by the research participants' firms sheds light on this strategy cascading approach in addition to identifying the dynamic capabilities and their microfoundations associated with this process.

Transforming. Participants believed that at their firms, people performance is aligned to corporate strategy through the performance management system. The transforming microfoundations of dynamic capabilities identified in the findings, are identified by this research study as ***transforming dynamic capabilities*** which were named 'people performance strategic alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Individual performance strategic alignment. This research study contributes to knowledge regarding the importance of people in the use of strategic performance management systems, where there was limited research (de Waal 2013).

Transforming. Participants believed that at their firms, individual performance is aligned with corporate strategy and that the performance management system enables this alignment through performance plans, goals, objectives, and metrics that reflect business goals and objectives. Participants perceived that at their firms, the same business performance metrics are used as performance objectives for individuals and for individual performance management and development. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'individual performance strategic alignment' and 'individual performance strategic alignment using performance system technology', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Research findings supported the view in the literature reviewed that *strategic performance management* focus on the quality of its staff (de Waal & Kourtit 2013; Neely 2008), and are considered a confirmation of current knowledge. Participants believed that at their firms, corporate strategy cascading to individuals concludes with determining and aligning the individual's personal and professional development and training requirements with the corporate strategy. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'people development strategic alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The transforming microfoundations of dynamic capabilities identified in the findings, showed similarity with the literature reviewed regarding

transforming dynamic capabilities referred to as training and development (Azadegan et al. 2008; Vijaya et al. 2019) and knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007), and are considered an addition to current knowledge.

Seizing. Participants believed that at their firms, as part of the corporate strategy cascade, leaders define individual performance objectives for roles including KPIs and financial performance objectives, which are included in individual performance plans. Participants perceived that individual performance objectives are aligned with their leader's performance objectives, business performance objectives and the corporate strategy, and are reset on an annual basis. Participants indicated that individuals are held accountable for achieving business objectives at their firms. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'developing individual performance objectives to deliver corporate strategy', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Reward systems for individual performance strategic alignment. Research findings supported the view in the literature reviewed that to achieve individual performance-driven behaviour, 'individual responsibilities, targets, and incentives should be aligned with the strategic objectives of the organization' (de Waal 2013, p. 232), and are considered a confirmation of current knowledge.

Transforming. Participants believed that at their firms, reward systems for individual performance are aligned with the individual's performance objectives and the corporate strategy, and that their firms reward people performance in relation to achieving the firm's performance objectives. These findings supported ***transforming microfoundations*** of dynamic capabilities in the literature reviewed referred to as a governance process to achieve incentive alignment (Teece 2009), and are considered a confirmation of current knowledge.

Team performance strategic alignment. The findings in Theme 9 challenged stage three of de Waal's (2013) three-staged approach to establish a strategic performance management system. Stage three includes designing a performance-driven behavioural

model and whilst it focuses on individuals and rewards it excludes the performance-driven benefits of team performance as identified by this research study.

Transforming. Participants believed that at their firms, team performance is aligned with corporate strategy, and performance measures and strategic objectives are also set for senior leadership teams. Participants indicated that teams across their firms are responsible for achieving team performance targets that are linked to firm performance and the corporate strategy, including strategic spend performance, strategic supply chain performance objectives and goals, business objectives for services, major project performance and significant strategic cost savings. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'team performance strategic alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

Seizing. Participants believed that at their firms, as part of the corporate strategy cascade each year, leaders define performance objectives and targets for teams, that are linked to the financial performance objectives and business objectives of the firm and the corporate strategy. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'developing team performance objectives to deliver corporate strategy', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The seizing microfoundations of dynamic capabilities identified in the findings in this theme, were consistent with the literature reviewed regarding ***seizing dynamic capabilities*** including strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) and performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007), and are considered a confirmation of current knowledge. In addition, the findings provided no indication that sensing dynamic capabilities and microfoundations of dynamic capabilities are associated with people performance strategic alignment.

Conclusions. This research study concludes that transforming and seizing dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy cascading using people performance strategic alignment to perform

as required within strategic supply chains and is considered an advance in knowledge. This research study concludes that sensing dynamic capabilities and microfoundations of dynamic capabilities are not associated with people performance strategic alignment, which is considered an advance in knowledge. This research study concludes that the capabilities listed in **Appendix J**, represent the seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 2: Corporate Strategy Cascading – to perform as required* and *Theme 9: People performance strategic alignment.*

5.2.2.6. *Theme 10: Addressing behavioural issues*

Theme 10 was established from the question pertaining to addressing behavioural factors that may arise in relation to the strategic performance management system, to ensure that the firm performs as required within its strategic supply chains, with insights provided by 18 participants. Twelve participants did not provide behavioural-related insights in relation to the strategic performance management system which did not impact the analysis.

In the extant literature reviewed, there was limited research on the importance of people in the use of strategic performance management systems and associated behavioural aspects (de Waal 2013). The findings in this research study contributes to knowledge as the causes of behavioural issues in relation to the strategic performance management system were identified.

Sensing. Participants believed that at their firms, people are driven by their individual metrics in the strategic performance management system, which can drive behaviour. Participants believed that at their firms, behavioural issues occur when:

- individual metrics do not make sense or are not the right metrics and therefore do not incentivise the right behaviour
- individuals have difficulty in committing to targets
- individuals do not feel that they can influence outcomes
- individuals want to measure progress and not outcomes
- there is lack of confidence in data interpretation, accuracy, and integrity
- there are individual and business unit reviews about matters that contravene each other.

In relation to the metrics, the findings supported the view in the literature reviewed that the way performance metrics are defined and calculated within a strategic performance management system can impact the behaviour of internal stakeholders (Najmi et al. 2012), and are considered a confirmation of current knowledge. These findings were identified by this research study as ***sensing microfoundations*** of dynamic capabilities which were named 'sensing behavioural issues related to the strategic performance management system' and 'sensing how individuals respond to performance management', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings also showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as sentiment sensing (Conboy et al. 2020), and are considered an addition to current knowledge.

The findings in this research study contributes to knowledge as the causes of behavioural issues in relation to the strategic performance management system technology were identified. Participants believed that their firm's strategic performance management system technology has contributed to causing behavioural issues including:

- performance reports that showed poor performance or low compliance caused a negative impact on behaviour
- people who were uncomfortable with receiving performance data daily when the numbers were not performing well, were adversely affected by the reports
- complex and confusing systems caused issues with global teams who had varying levels of computer skills, with limited feedback provided and the process lost credibility
- people will not use the system when they do not understand how to use the system.

These findings were identified by this research study as ***sensing microfoundations*** of dynamic capabilities which were named 'sensing behavioural issues related to the strategic performance management system technology', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

The sensing microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***sensing dynamic capabilities*** which were named 'strategic performance behaviour sensing', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The findings also supported ***sensing dynamic capabilities*** in the literature reviewed referred to process management (Benner & Tushman 2015; Vijaya et al. 2019; Zollo & Winter 2002) and performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007), which are considered a confirmation of current knowledge.

Seizing. Participants believed that their firms adopted proactive strategies to minimise behavioural issues relating to their strategic performance management system, including:

- by understanding what the firm is trying to motivate and what behaviour the firm is trying to incentivise
- by getting the individual metrics right and having the right technology, data, and information to support the metrics
- by focussing individuals on KPIs that drive the firm's objectives
- by focussing individuals on what is best for the firm
- by helping individuals to see the bigger story, why it is needed and involve them in building how it can be achieved
- by ensuring that metrics are broken down to measures that are recognisable and can be influenced by the team and individual
- by creating the connection of the individual metrics to the higher order metrics
- by addressing conflict using escalation and management processes.

These research findings challenged stage three of de Waal's (2013) three-staged approach to establish a strategic performance management system. Stage three includes designing a performance-driven behavioural model however this research study builds upon the proactive performance behavioural strategies used by executives relating to their strategic performance management system to minimise behavioural issues. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'adopting proactive strategies to minimise behavioural issues related to the strategic performance

management system', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings also showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as seizing opportunities by overcoming resistance to change (Kareem & Alameer 2019; Khan et al. 2020), and are considered an addition to current knowledge.

Seizing and Transforming. Participants believed that their firms adopted proactive strategies to minimise behavioural issues relating to their strategic performance management system technology, including:

- ensure that there is committed, visible and sustained leadership from top management
- use the technology to provide teams with insight regarding how well processes are followed and keep teams up to date regarding where performance is at in relation to the corporate strategy
- take into consideration the best way to report and present performance reports that show poor performance or low compliance when working with the business units, to prevent causing a negative impact on behaviour
- promote the benefits of the performance system technology to the people to gain buy-in and increase engagement with using the tool
- the system must be simple and user friendly
- allow people to spend the time and invest the time in using the tools well
- train people how to use the system to prevent the system from being under-utilised, to prevent costs from increasing and to grow expertise.

These research findings also challenged stage three of de Waal's (2013) three-staged approach to establish a strategic performance management system. This research study builds upon de Waal's (2013) three-staged approach with the proactive performance behavioural strategies used by executives relating to their strategic performance management system technology to minimise behavioural issues. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'adopting proactive strategies to minimise behavioural issues related to the strategic performance management system technology', and due to no relevant references in the extant dynamic capabilities literature reviewed, are

considered an advance in knowledge. These findings also supported ***transforming microfoundations*** of dynamic capabilities in the literature reviewed including knowledge integration through training of employees (Khan et al. 2020) and knowledge management by learning (Teece 2009), which are considered a confirmation of current knowledge. The transforming microfoundations of dynamic capabilities identified in these findings, supported ***transforming dynamic capabilities*** in the literature reviewed including training and development (Azadegan et al. 2008; Vijaya et al. 2019) and knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007), which are considered a confirmation of current knowledge.

Seizing and Transforming. Participants believed that their firms' strategic performance management system includes behavioural objectives and is aligned with the values and culture of the firm, and that the success of the corporate strategy is dependent on individuals adopting the firm's values and culture. Participants believed that at their firm, the correlation between the firm's values and corporate strategy is critical, and that the firm's culture starts from the corporate strategy rollout down to the team members who are executing the tasks. Participants believed that their firms' strategic performance management system measures individuals against the values and goals of the firm which make up part of the overall corporate strategy to ensure that individuals in the firm are all aligned. These findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as building loyalty and commitment by recognising non-economic factors, values, and culture (Teece 2009), and are considered an addition to current knowledge. The 'alignment' aspect within these findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'aligning behaviours with the values and culture of the firm', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The transforming microfoundations of dynamic capabilities identified in these findings, were identified by this research study as ***transforming dynamic capabilities*** this research study named 'organisational values and culture alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge.

The seizing microfoundations of dynamic capabilities identified in the findings in Theme 10, were identified by this research study as ***seizing dynamic capabilities*** which were named 'strategic performance behaviour management', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, were consistent with the literature reviewed regarding ***seizing dynamic capabilities*** including strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019), stakeholder management (Sodhi 2015) and performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007), which are considered a confirmation of current knowledge.

Conclusions. This research study concludes that sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy cascading using processes to address behavioural issues to perform as required within strategic supply chains, and is considered an advance in knowledge. This research study concludes that sensing dynamic capabilities and microfoundations of dynamic capabilities were dominant in identifying behavioural issues; and seizing dynamic capabilities and microfoundations of dynamic capabilities were dominant in proactively minimising behavioural issues; and transforming dynamic capabilities and microfoundations of dynamic capabilities supported seizing capabilities by addressing knowledge and skills requirements. This research study concludes that the capabilities listed in **Appendix J**, represent the sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 2: Corporate Strategy Cascading – to perform as required* and *Theme 10: Addressing behavioural issues.*

5.2.2.7. *Theme 11: Strategic supply chain relationships and alignment*

Theme 11 was established from the question pertaining to mastering cross-firm supply chain relationship management and the role of technology, to ensure that the firm performs as required within its strategic supply chains. Twenty-three participants provided insights in relation to supply chain relationships with strategic customers and/or strategic suppliers which enabled good representation in the analysis. Seven participants did not provide insights in relation to cross-firm relationships which did not impact the analysis. Supply chain researchers Alomar and Pasek (2014)

acknowledged that a firm can achieve a competitive advantage and improvements using *strategic performance management*, but they cautioned that a firm's approach to performance improvement must reflect the evolution of competition moving from firm level to the supply chain level. This evolution of competition observation by Alomar and Pasek (2014) indicated a limitation of *strategic performance management* because it focuses on firm level performance, whereas *supply chain performance management* focusses on both firm level and supply chain level performance. The findings in relation to Theme 11, represents an advance in knowledge in the *strategic performance management* domain.

5.2.2.7.1. *Theme 11a: Supply chain relationships and alignment with strategic customers*

Sixteen participants provided insights regarding their firm's relationships with strategic customers, of which nine of these participants provided insights in regarding the development and incorporation of customer-focussed supply chain strategies into their firm's corporate strategy which was discussed in Theme 2. The findings in Theme 11a challenged stage three of de Waal's (2013) three-staged approach to establish a strategic performance management system. Stage three includes designing a performance-driven behavioural model however it excludes the performance-driven benefits of strategic supply chain alignment with strategic customers as identified by this research study.

Seizing. Participants perceived that their firms mastered cross-firm customer relationship management with strategic customers through executing services promised through teams (who are part of cross-functional teams), account management by key personnel, meeting agreed objectives and performance requirements, client meetings, reviewing performance with customers, meeting legislative compliance requirements, and working together to improve customer processes and technology requirements, in alignment with corporate strategy. Participants believed that their firm's relationships with strategic customers were based on mutual trust and respect which was built by both sides establishing and maintaining effective working relationships to align priorities between the firms and performance expectations. Participants believed that top management are involved in the management of relationships with major strategic customers and meet several

times per year to align strategies and review how customers are serviced. These findings do not support the view that *supply chain performance management* lacks top management dedication or lacks appropriate implementation (Katiyar, cited in Wankhade & Kundu 2018, p. 224), and are considered an advance in knowledge. Participants indicated that their firms conducted regular meetings with strategic customers to discuss operational matters and to review the firm's performance to meet the KPIs required of the strategic customers (performance objectives and KPIs discussed in Themes 4 and 6). Participants perceived that at their firms, relationships with strategic customers are maintained by managing agreed objectives and by prioritising the needs of customers. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'strategic customer relationship performance management', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as collaboration (Khan et al. 2020), and are considered an addition to current knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, were consistent with the literature reviewed regarding ***seizing dynamic capabilities*** including customer relationship management (Barrales-Molina et al. 2014; Vanpoucke et al. 2014; Vijaya et al. 2019), inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019), performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) and strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019), and are considered a confirmation of current knowledge.

Transforming. Participants indicated that their firms mastered cross-firm relationships and alignment with strategic customers by using technology that supported the relationships. Participants perceived that their firms used integrated processes enabled by technology (including EDI and supplier portals) to improve order management and product flow, and to access the customers' forward order plans and forecasting. Participants indicated that their firms used reporting and collaboration technology that clients could access, which enabled open and honest discussion regarding the firm's performance as the parties had access to the same performance data and baseline. Participants believed that visibility, transparency, and communication enhanced

relationships with strategic customers, which included using technology that provided customers with real time information about deliveries and that automated the proof of delivery storage and the retrieval process. These findings supported the view in the literature reviewed that a firm's performance and the performance of its supply chain partners can improve when using integrated supply chain practices and processes with customers (Cook et al. 2011; Enz & Lambert 2012; Gandhi et al. 2017; Gorane & Kant 2017; Lambert 2010; Lambert & Schwieterman 2012; Lambert et al. 2010; Lambert 2014; Wankhade & Kundu 2018), and are considered a confirmation of current knowledge. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'process integration with strategic customers enabled by technology', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings showed similarity with the literature reviewed regarding ***transforming microfoundations*** of dynamic capabilities referred to as real-time process reconfiguration (Conboy et al. 2020), and are considered an addition to current knowledge. The transforming microfoundations of dynamic capabilities identified in the findings, are identified by this research study as ***transforming dynamic capabilities*** which were named 'strategic supply chain performance alignment', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The transforming microfoundations of dynamic capabilities identified in these findings, also supported ***transforming dynamic capabilities*** in the literature reviewed including customer relationship management (Barrales-Molina et al. 2014; Vanpoucke et al. 2014; Vijaya et al. 2019) and information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019), and are considered a confirmation of current knowledge.

Sensing. Participants perceived that their firms mastered cross-firm customer relationship management with strategic customers by constantly reviewing performance, performance reporting, sourcing the right products, identifying customer needs and requirements, and reviewing legislative compliance requirements. Participants believed that their firms are constantly reviewing and assessing how the firm is performing in terms of serving customers, by using KPIs that demonstrate this performance to customers (performance objectives and KPIs discussed in Themes 4 and 6). Participants believed that top management at their firms review how major

strategic customers are serviced to ensure that customers and product users remain a key priority. Participants indicated that their firm uses technology to measure and capture customer feedback, to remove subjectiveness from performance reporting, to provide performance evidence to customers, and to monitor customer satisfaction and customer complaints. These findings supported the view in the literature reviewed that the strategic performance management process includes reviewing customer satisfaction (Chau 2008; Franco-Santos et al. 2012) and level of delivery service to customers (Adler 2011), and are considered a confirmation of current knowledge. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as monitoring internal developments (Sprafke et al. 2012), and are considered an addition to current knowledge. Participants indicated that their firms monitor the changing needs of customers including supplier compliance requirements, technology requirements and needs, customer training needs to use products, product quality requirements and changes in customer preferences. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities including processes to identify changing customer needs (Teece 2009), detect how customers are shifting (Teece 2009) and market monitoring of customer needs (Khan et al. 2020), which are considered an addition to current knowledge.

Participants indicated that their firms monitor customer-related requirements external to their firms including constantly reviewing compliance with legislative frameworks; ensuring that services do not negatively impact the customer's budgets; monitoring cross-firm performance using technology; identifying ways that customers can improve competitiveness; identifying ways to help customers to operate to improve supply chain visibility for customers; and monitoring supplier impacts on customer supply chains. These findings were identified by this research study as ***sensing microfoundations*** of dynamic capabilities which were named 'customer-focused external environment monitoring', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings also showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as external process sensing (Conboy et al. 2020), and are considered an addition to current knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, were identified as

sensing dynamic capabilities which this research study named 'strategic supply chain sensing' (also identified in Themes 1, 2 and 3, further supporting an advance in knowledge). The sensing microfoundations of dynamic capabilities identified in the findings, were consistent with the literature reviewed regarding ***sensing dynamic capabilities*** including customer orientation (Vijaya et al. 2019; Zhou & Li 2010), customer relationship management (Barrales-Molina et al. 2014; Vanpoucke et al. 2014; Vijaya et al. 2019) and performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007), and are considered a confirmation of current knowledge.

Conclusions. This research study concludes that seizing, transforming and sensing dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy cascading using supply chain relationships and alignment with strategic customers to perform as required within strategic supply chains, and is considered an advance in knowledge. This research study concludes that the capabilities listed in **Appendix J**, represent the sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 2: Corporate Strategy Cascading – to perform as required* and *Theme 11a: Supply chain relationships and alignment with strategic customers.*

5.2.2.7.2. *Theme 11b: Supply chain relationships and alignment with strategic suppliers*

Fourteen participants provided perceptions and insights regarding their firm's relationships with strategic suppliers, of which five of these participants provided insights in regarding the development and incorporation of supplier-focussed supply chain strategies into their firm's corporate strategy which was discussed in Theme 2. The findings in Theme 11b also challenged stage three of de Waal's (2013) three-staged approach to establish a strategic performance management system. Stage three includes designing a performance-driven behavioural model however it excludes the performance-driven benefits of strategic supply chain alignment with strategic suppliers as identified by this research study. The extant literature reviewed regarding *strategic performance management* demonstrated that this domain largely ignored the role of suppliers (de Waal 2013). The findings in Theme 11b represent an advance in knowledge in the *strategic performance management* domain.

Seizing. Participants perceived that their firms mastered cross-firm supplier relationship management with strategic suppliers through developing relationships through key personnel and teams (who are part of cross-functional teams), conducting supplier meetings, contract management processes, category management processes, sharing forecasts and plans, and by working together to discuss and improve supplier performance, processes, and technology requirements, in alignment with corporate strategy. Participants believed that top management are involved in the management of relationships with major strategic suppliers to conduct business review meetings and ensure that there is transparency in the relationship. These findings do not support the view that *supply chain performance management* lacks top management dedication or lacks appropriate implementation (Katiyar, cited in Wankhade & Kundu 2018, p. 224), and are considered an advance in knowledge. Participants indicated that their firms focused on keeping supplier relationships simple to avoid increasing the complexity of the relationship, and focused on supporting good supplier behaviours, and addressing poor behaviours. Participants believed that their firms worked closely with suppliers to improve and expedite supplier evaluation and selection and relied on contract managers to manage relationships with suppliers. These findings were identified by this research study as ***seizing microfoundations*** of dynamic capabilities which were named 'strategic supplier relationship performance management', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings showed similarity with the literature reviewed regarding ***seizing microfoundations*** of dynamic capabilities referred to as collaboration (Khan et al. 2020), and are considered an addition to current knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***seizing dynamic capabilities*** which were named 'supplier relationship management', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The seizing microfoundations of dynamic capabilities identified in the findings, were also consistent with the literature reviewed regarding ***seizing dynamic capabilities*** including inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019), performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) and strategy execution

capability (Harreld et al. 2007; Vijaya et al. 2019), which are considered a confirmation of current knowledge.

Transforming. Participants perceived that their firms mastered cross-firm relationships and alignment with strategic suppliers by using technology that supported the relationships. Participants believed that their firms used integrated processes enabled by upgrading technology (including EDI, ERP sourcing technology and other software) to achieve real time information sharing, supply chain visibility of product, freight visibility, and to increase the efficiency of supplier sourcing, tendering, supplier evaluation and selection, and the procure to pay process. These findings supported the view in the literature reviewed that a firm's performance and the performance of its supply chain partners can improve when using integrated supply chain practices and processes with suppliers (Cook et al. 2011; Enz & Lambert 2012; Gandhi et al. 2017; Gorane & Kant 2017; Lambert 2010; Lambert & Schwieterman 2012; Lambert et al. 2010; Lambert 2014; Wankhade & Kundu 2018), and are considered a confirmation of current knowledge. These findings were identified by this research study as ***transforming microfoundations*** of dynamic capabilities which were named 'process integration with strategic suppliers enabled by technology', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The findings showed similarity with the literature reviewed regarding ***transforming microfoundations*** of dynamic capabilities referred to as real-time process reconfiguration (Conboy et al. 2020) and technological upgradation (Khan et al. 2020), and are considered an addition to current knowledge. Participants perceived that their firms managed supply chain risks and threats in relation to supply from suppliers to ensure that their firms were able to serve customers and leveraged supply risk across multiple suppliers. These findings were supported in the literature reviewed regarding supply chain risk in relation to the importance of suppliers due to their impact on the firm's ability to service its customers (Marr 2006), and are considered a confirmation of current knowledge. These findings are identified by this research study as ***transforming microfoundations*** of dynamic capabilities and were named 'managing strategic supply chain threats to competitive advantages', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. The transforming microfoundations of dynamic capabilities identified in the findings, are identified by this research study as

transforming dynamic capabilities which were named 'strategic supply chain performance alignment' (also identified in Theme 11a, further supporting an advance in knowledge) and 'supplier relationship management' (also identified above, further supporting an advance in knowledge). The transforming microfoundations of dynamic capabilities identified in these findings, supported ***transforming dynamic capabilities*** in the literature reviewed including information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019) and managing threats (Teece 2009), which are considered a confirmation of current knowledge.

Sensing. Participants perceived that their firms mastered cross-firm supplier relationship management with strategic suppliers through monitoring spend, supplier relationships and supplier performance (performance objectives and KPIs discussed in Themes 4 and 6). Participants believed that their firms conduct spend analysis and seek to reduce maverick spend; use data analytics to identify required improvements with suppliers and to gain actionable insights; and identify where the firm can continuously improve supplier relationships. These findings showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as monitoring internal developments (Sprafke et al. 2012), and are considered an addition to current knowledge. Participants indicated that their firms monitored supplier-related requirements external to their firms including supplier performance, contractor performance, goods delivery, potential supply disruption, and identified supplier development requirements to improve supplier performance, to help the firm achieve strategic objectives. These findings were identified by this research study as ***sensing microfoundations*** of dynamic capabilities which were named 'supplier-focused external environment monitoring' and 'supplier performance measurement', and due to no relevant references in the extant dynamic capabilities literature reviewed, are considered an advance in knowledge. These findings also showed similarity with the literature reviewed regarding ***sensing microfoundations*** of dynamic capabilities referred to as external process sensing (Conboy et al. 2020), and are considered an addition to current knowledge. The sensing microfoundations of dynamic capabilities identified in the findings, were identified by this research study as ***sensing dynamic capabilities*** which were named 'strategic supply chain sensing' (also identified in Themes 1, 2, 3 and 11a, further supporting an advance in knowledge), 'supplier relationship management' (also identified above, further supporting an advance in

knowledge) and ‘supplier orientation’ (also identified in Theme 2, further supporting an advance in knowledge). The sensing microfoundations of dynamic capabilities identified in the findings, were also consistent with the literature reviewed regarding ***sensing dynamic capabilities*** referred to as performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007), and are considered a confirmation of current knowledge.

Conclusions. This research study concludes that sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy cascading using supply chain relationships and alignment with strategic suppliers to perform as required within strategic supply chains, and is considered an advance in knowledge. This research study concludes that the capabilities listed in **Appendix J**, represent the sensing, seizing and transforming dynamic capabilities and microfoundations of dynamic capabilities associated with *Research Issue 2: Corporate Strategy Cascading – to perform as required* and *Theme 11b: Supply chain relationships and alignment with strategic suppliers.*

5.3. Conclusions about the research problem

The previous section discussed the findings pertaining to each research issue per key theme in the context of the literature reviewed in Chapter 2, summarised conclusions and classified the contribution to knowledge by this research. This section articulates the conclusions related to the research problem. The discussion and conclusions regarding the two research issues offer a solid basis for drawing conclusions about the research problem: *How do executives at top performing B2B firms in Australia form and cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains?*

This research study linked the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* using Dynamic Capabilities Theory. A summary of conclusions about the research problem is presented in **Table 5.2** which are considered an advance in knowledge.

Table 5.2: Summary of conclusions about the research problem

<table>
<tr><td colspan="2">This research study concludes that sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with:</td></tr>
<tr><td>corporate strategy formulation with a strategic supply chain focus by:
top management recognising the value of strategic supply chains and having at least one person on the team that understands supply chain
bringing top management closer to strategic supply chains through the involvement of key supply chain-focused personnel to ensure that the B2B firm gains and sustains significant supply chain competitive advantages
incorporating strategic supply chain strategies as strategic supply chain opportunities to ensure that the firm gains and sustains significant supply chain competitive advantages
incorporating strategic supply chain configuration decisions and plans as strategic supply chain opportunities to gain and sustain significant supply chain competitive advantages and superior supply chain performance
incorporating strategic supply chain performance objectives to ensure that the firm performs as required within its strategic supply chains and to gain and sustain competitive advantage.</td><td>corporate strategy cascading to perform as required within strategic supply chains and to gain and sustain significant supply chain competitive advantages and achieve superior supply chain performance using:
corporate strategy rollout (excluding sensing capabilities)
strategic performance alignment (excluding sensing capabilities)
strategic performance management system technology
cross-functional relationship management and alignment
people performance strategic alignment (excluding sensing capabilities)
proactive behavioural strategies
strategic supply chain relationships and alignment with strategic customers and strategic suppliers.</td></tr>
<tr><td colspan="2">This research study concludes that transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy execution through strategic supply chain performance transformation activities to sustain competitive advantage and superior supply chain performance, by implementing strategic supply chain reconfiguration decisions pertaining to:
supply chain network decisions (including manufacturing) to transform the supply chain network
enterprise-wide IT and decision support systems decisions to transform internal technology requirements and practices
supply chain technology decisions (including data integration) to transform supply chain technology requirements and practices.</td></tr>
</table>

This research concludes that sensing dynamic capabilities and microfoundations of dynamic capabilities are not associated with corporate strategy cascading during corporate strategy rollout, strategic performance alignment and people performance strategic alignment, which is considered an advance in knowledge.

5.3.1. Associated dynamic capabilities and microfoundations

By addressing the intersection of the two major domains using Dynamic Capabilities Theory, this research study identified 50 types of dynamic capabilities and 94 types of microfoundations of dynamic capabilities associated with forming and cascading corporate strategy with a strategic supply chain performance focus, contributing to knowledge in Dynamic Capabilities Theory (**Appendices I** and **J**). The number of types of dynamic capabilities and microfoundations of dynamic capabilities associated with the research problem, and the two research issues, and contribution to knowledge in Dynamic Capabilities Theory, are displayed in **Table 5.3**.

Table 5.3: Number of types of dynamic capabilities and microfoundations associated with the research problem identified at least once

Corporate Strategy Formulation and Corporate Strategy Cascading with a strategic supply chain performance focus [Research Problem]				
Number of capability types identified at least once	***Sensing***	***Seizing***	***Transforming***	***Total***
Dynamic capabilities	**15**	**20**	**15**	**50**
Advance in current knowledge	6	10	9	25
Addition to current knowledge	7	4	4	15
Confirmation of current knowledge	2	7	4	13
Microfoundations of dynamic capabilities	**35**	**31**	**28**	**94**
Advance in current knowledge	11	15	20	46
Addition to current knowledge	26	15	6	47
Confirmation of current knowledge	0	5	4	9
By Research Issue:	***Sensing***	***Seizing***	***Transforming***	***Total***
Corporate Strategy Formulation with a strategic supply chain focus [Research Issue 1]				
Dynamic capabilities	**9**	**11**	**2**	**22**
Advance in current knowledge	4	7	1	**12**
Addition to current knowledge	6	3	1	**10**
Confirmation of current knowledge	0	2	1	**3**
Microfoundations of dynamic capabilities	**24**	**14**	**4**	**42**
Advance in current knowledge	5	8	3	**16**
Addition to current knowledge	19	6	1	**26**
Confirmation of current knowledge	0	3	0	**3**
Corporate Strategy Cascading to perform as required within strategic supply chains [Research Issue 2]				
Dynamic capabilities	**10**	**11**	**14**	**35**
Advance in current knowledge	4	3	8	**15**
Addition to current knowledge	2	2	4	**8**
Confirmation of current knowledge	2	5	3	**10**
Microfoundations of dynamic capabilities	**14**	**19**	**24**	**57**
Advance in current knowledge	6	7	17	**30**
Addition to current knowledge	10	11	5	**26**
Confirmation of current knowledge	0	2	4	**6**

This research study identified 22 types of dynamic capabilities and 42 types of microfoundations of dynamic capabilities associated with corporate strategy formulation with a strategic supply chain focus, contributing to knowledge in Dynamic Capabilities Theory (**Appendix I**). This research study identified 35 types of dynamic capabilities and 57 types of microfoundations of dynamic capabilities associated with corporate strategy cascading to perform as required within strategic supply chains, contributing to knowledge in Dynamic Capabilities Theory (**Appendix J**). The number of types of dynamic capabilities and microfoundations of dynamic capabilities associated with these processes, considered as advance in, an addition to, or confirmation of current knowledge in Dynamic Capabilities Theory, are displayed in **Table 5.3**.

It is interesting to note that seven types of dynamic capabilities are common to both corporate strategy formulation and corporate strategy cascading with a strategic supply chain performance focus including: (sensing) customer orientation (Vijaya et al. 2019; Zhou & Li 2010); (sensing) supplier orientation; (sensing) strategic supply chain sensing; (sensing) information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019); (seizing) stakeholder management (Sodhi 2015); (seizing) inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019); and (transforming) knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007). Five types of microfoundations of dynamic capabilities are also common to both processes including: (sensing) detect how customers are shifting (Teece 2009); (sensing) market monitoring of customer needs (Khan et al. 2020); (sensing) technology scanning of technological developments (Khan et al. 2020); (seizing) building loyalty and commitment by demonstrating leadership (Teece 2009); and (seizing) collaboration (Khan et al. 2020). The capabilities common to both processes confirms that executives and their firms are continuously focused on learning about the requirements of strategic supply chains and about leading and collaborating internally and externally to develop and deliver the corporate strategy. More common types of transforming capabilities were not expected since transforming capabilities are mostly used during corporate strategy cascading. As an additional insight, this research study also identified five types of transforming dynamic capabilities and nine types of transforming microfoundations of dynamic capabilities associated with strategic

supply chain performance transformation as a result of corporate strategy execution, contributing to knowledge in Dynamic Capabilities Theory (**Appendix K**).

5.3.2. How the key themes helped to resolve the research problem

This section articulates how the research problem was resolved by summarising the relationships between the key themes as depicted in **Figure 5.2**.

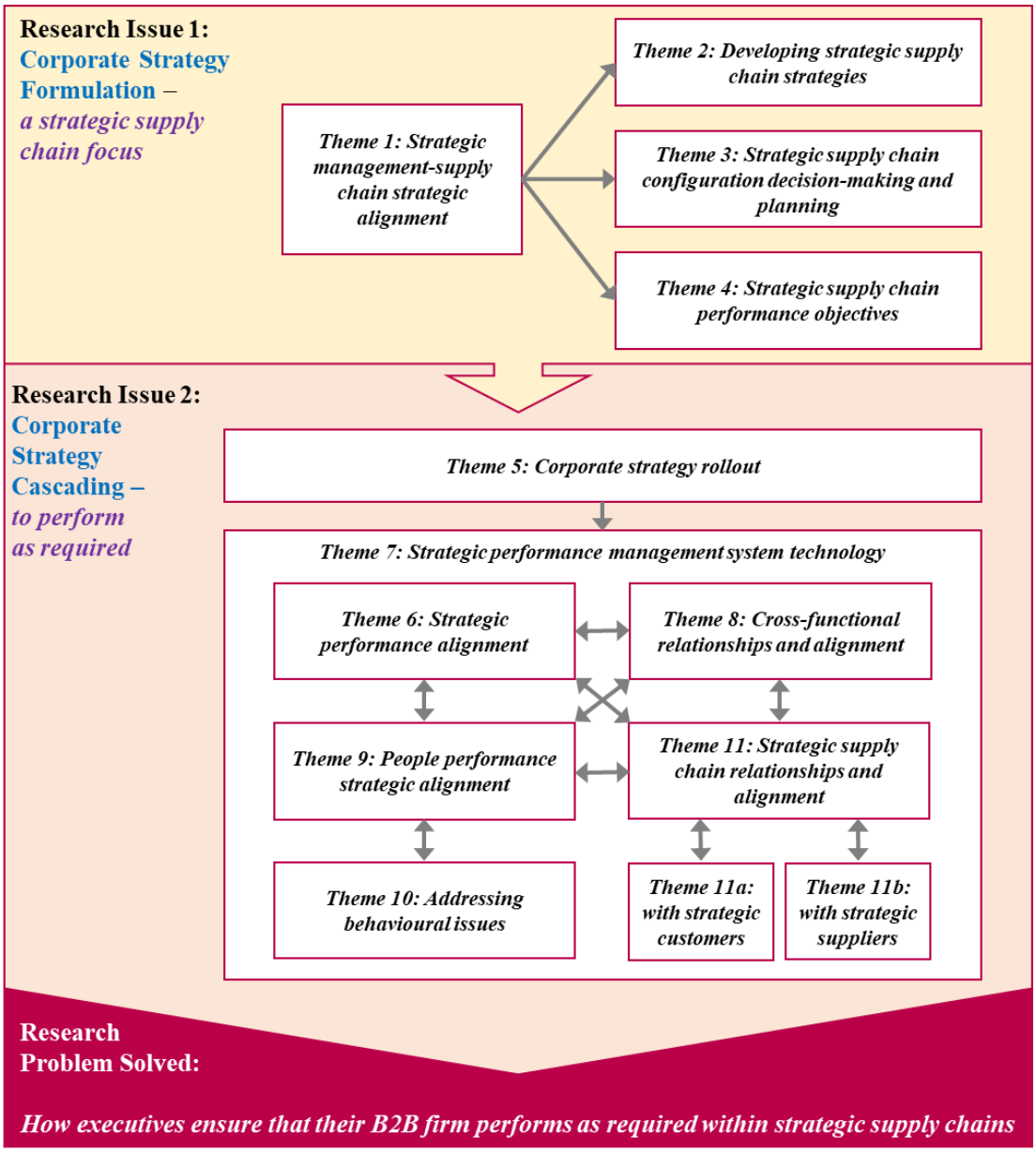

Figure 5.2: Relationships between Key Themes

Corporate strategy formulation with a strategic supply chain focus. The findings of this research study lend support to the argument in the literature that the strategic performance management process plays a significant role in the development,

continuous refinement and implementation of the corporate strategy (de Waal & Kourtit 2013; Neely 2008). This research study concludes that strategic supply chain considerations are a key element in corporate strategy (Theme 1), including strategic supply chain strategies (Theme 2), strategic supply chain configuration decisions (Theme 3) and strategic supply chain performance objectives (Theme 4). This research study concludes that sensing and seizing dynamic capabilities dominate the corporate strategy formulation process, as identified in **Table 5.3**. To sense and shape strategic supply chain opportunities and threats during corporate strategy formulation, some of the *sensing dynamic capabilities* central in the findings include customer orientation (Vijaya et al. 2019; Zhou & Li 2010), entrepreneurial (Teece 2009) and strategic supply chain sensing. The findings supported the view in the literature reviewed that firms with 'strong dynamic capabilities are intensely entrepreneurial' (Teece 2009, p. 4), and are considered a confirmation of current knowledge. Executives and firms build, evolve, and develop dynamic capabilities through microfoundations of dynamic capabilities (Fallon-Byrne & Harney 2017). Some of the *sensing microfoundations* of dynamic capabilities central in the findings that helped to build the *sensing dynamic capabilities* include interpreting available information (Khan et al. 2020; Teece 2009), monitoring of market trends (Khan et al. 2020), sensing strategic supply chain threats to competitive advantages, and top management detecting the importance and value of the supply chain and of incorporating strategic supply chain considerations into corporate strategy. This research study concludes that top management recognise the criticality and importance of strategic supply chains to drive value, firm growth, customer satisfaction, and to improve the performance and competitiveness of the firm and its supply chains end-to-end, locally and globally. The relationship between Theme 1 and Themes 2 to 4 stems from similar actors being involved in each theme, being top management and key personnel, including key supply chain-focused personnel. Together, these actors identify, develop, and incorporate strategic opportunities, strategies, decisions, objectives, and solutions into corporate strategy, in relation to strategic requirements for the firm and its strategic supply chains and operations.

To seize opportunities during corporate strategy formulation, some of the *seizing dynamic capabilities* central in the findings include stakeholder management (Sodhi 2015), top executive's cognitive capability and style (Carpenter et al. 2001; Kor &

Mesko 2013), strategic supply chain decision-making and strategic supply chain configuration decision-making and planning. Some of the *seizing microfoundations* of dynamic capabilities central in the findings include building loyalty and commitment by effectively communicating (Teece 2009), seizing strategic supply chain opportunities while maintaining commitment of key supply chain-focused stakeholders, and strategic planning to seize strategic supply chain opportunities and determine supply chain strategic objectives. The actors develop unique and difficult-to-replicate capabilities to enhance the firm's performance and to sustain competitive advantage long term (Teece 2009) by working together during corporate strategy formulation to develop competitive strategies and to make competitive decisions. To transform the firm during corporate strategy formulation, the *transforming dynamic capabilities* central in the findings include strategic management-supply chain strategic alignment and knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007). Through their involvement, key supply chain-focused personnel bring top management closer to understanding the requirements of the firm's strategic supply chains, which enables informed decision-making, and top management also align key supply chain-focused personnel with the firm's requirements, especially as a prerequisite to developing the supply chain strategy. The *transforming microfoundations* of dynamic capabilities central in the findings and possibly three of the most important capabilities, include decentralised strategic decision-making to bring top management closer to strategic supply chain elements, combining strategic management and strategic supply chain skills and knowledge, and supply chain knowledge transfer to top management. This research study did not address other elements that top management may incorporate into corporate strategy, as this research study focused on the strategic supply chain, which is a limitation of this research and is discussed in Section 5.6.

Corporate strategy cascading to perform as required within strategic supply chains. This research study concludes that *transforming dynamic capabilities* dominate the corporate strategy cascading process, to perform as required within strategic supply chains, closely followed by seizing and sensing dynamic capabilities, as identified in **Table 5.3**. While *seizing dynamic capabilities* are used to rollout the corporate strategy, if the firm is not technology-ready and/or knowledge-ready for a successful

strategy cascade, *transforming dynamic capabilities* are used to get cascade-ready and *sensing dynamic capabilities* are used to detect process issues.

Firms that are technology-ready, knowledge-ready, and process-ready, commence the corporate strategy cascade using *seizing dynamic capabilities*. Through corporate strategy rollout (Theme 5), this research study concludes that a cascade-ready corporate strategy cascade commences with firm-wide communication of the strategy, followed by firm-wide deployment and strategic alignment, including the development and strategic alignment of business plans and budgets. The corporate strategy rollout is led by top management to illustrate their commitment to, and the importance they place on the strategy. To seize opportunities using corporate strategy cascading, some of the *seizing dynamic capabilities* central in the findings include strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019), corporate strategy cascading via deployment, performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007), stakeholder management (Sodhi 2015) and inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019).

At this point it is imperative to mention that strategic performance management system technology (Theme 7) is linked to all themes in Research Issue 2. This research study concludes that strategic performance management system technology plays a central role in corporate strategy rollout and ongoing execution. Corporate strategy rollout (Theme 5) is linked to Themes 6 to 11 through the rollout and execution of corporate strategy, as business objectives and goals are entered in the strategic performance management system technology during the corporate strategy rollout. Some of the *seizing microfoundations* of dynamic capabilities central in the findings include building loyalty and commitment by effectively communicating and demonstrating leadership (Teece 2009), communicating goals (Sprafke et al. 2012; Teece 2009), seizing opportunities while maintaining commitment of key stakeholders (Suddaby et al. 2019), collaboration (Khan et al. 2020) and developing business plans, objectives, budgets, and metrics to deliver the corporate strategy to seize opportunities.

Strategic performance alignment (Theme 6) is linked to all themes in Research Issue 2, either directly or indirectly. This research study concludes that the corporate strategy cascade includes the rollout and alignment of relevant financial KPIs and non-financial

KPIs, where strategic KPIs are translated into operational KPIs supported by the strategic performance management system technology and firm-wide performance scorecard. The KPI rollout from board level to employee level, is governed by organisational processes to ensure that KPIs span across specific performance categories and are cascaded and developed top-down to maintain alignment with corporate strategy. The rollout also includes alignment of the supply chain strategy and supply chain costs to corporate strategy. To sense and shape strategic supply chain opportunities and threats during corporate strategy cascading, some of the *sensing dynamic capabilities* central in the findings include performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007), process management (Benner & Tushman 2015; Vijaya et al. 2019; Zollo & Winter 2002) and strategic supply chain sensing. This research study concludes that staff are constantly trained how to use strategic performance management system technology (Theme 7) to ensure that the technology capability is fully utilised. Executives heavily invest in upgrading this technology to allow their firms to increase the effectiveness and efficiency of the performance management of the firm and its supply chains, to gain analytical insights as soon as possible to make decisions and drive business improvement. Some of the *sensing microfoundations* of dynamic capabilities central in the findings include monitoring internal developments (Sprafke et al. 2012), external process sensing (Conboy et al. 2020) and firm and supply chain performance monitoring and reporting.

Cross-functional relationships and alignment (Theme 8) is linked to all themes in Research Issue 2, either directly or indirectly. This research study concludes that cross-functional alignment between cross-functional teams and top management occurs during corporate strategy formulation and when top management participate on cross-functional management groups. Cross-functional relationship management and alignment is mastered by mobilising cross-functional teams with the right stakeholders, driven by cross-functional champions, through cross-functional processes to achieve common business objectives that are aligned with corporate strategy, with relationships built through meetings and supported by collaborative technology. Cross-functional relationships and alignment (Theme 8) is heavily supported by people performance strategic alignment (Theme 9) which reinforces alignment with corporate strategy. People performance strategic alignment (Theme 9) is linked to Themes 5 to 10. This research study concludes that people performance is

managed through individual performance, a rewards system and team performance (including cross-functional teams), by aligning performance metrics, objectives, rewards, and people development with the corporate strategy through the strategic performance management system technology. To transform the firm during corporate strategy cascading, some of the *transforming dynamic capabilities* central in the findings include knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007), information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019), training and development (Azadegan et al. 2008; Vijaya et al. 2019), people performance strategic alignment and strategic supply chain performance alignment. Addressing behavioural issues (Theme 10) is closely linked with people performance strategic alignment (Theme 9). This research study concludes that people are driven by their individual metrics in the strategic performance management system, and a range of behavioural issues are caused by the metrics, the system and related technology. Sensing behavioural issues enables the development of a range of proactive behavioural-related strategies to minimise behavioural issues, including performance system and technology training, and through top-down values and culture alignment. Some of the *transforming microfoundations* of dynamic capabilities central in the findings include knowledge integration through training of employees (Khan et al. 2020), knowledge management by learning (Teece 2009), aligning behaviours with the values and culture of the firm, real-time process reconfiguration (Conboy et al. 2020) and technological upgradation (Khan et al. 2020).

Strategic supply chain relationships and alignment (Theme 11) is linked to most themes, excluding Theme 10 as performance-related behavioural issues are addressed internally. This research study concludes that strategic supply chain relationships with strategic customers (Theme 11a) and strategic suppliers (Theme 11b) are managed by developing the relationships in alignment with corporate strategy, via key personnel and teams (who are part of cross-functional teams); process integration, managing performance, monitoring customer/supplier-related external processes and requirements, monitoring the changing needs of strategic customers; and by monitoring and managing supply risks and threats that may impact commitments to strategic customers and the firm's revenue. Strategic supply chain relationships are based on mutual trust and respect by working together to establish effective working

relationships, by aligning priorities and strategies, executing promises, meeting agreed objectives and performance requirements, and through the involvement of top management to ensure that the needs of strategic relationships are met. Strategic supply chain relationships are supported by integrated processes enabled by technology to enhance supply chain performance, visibility, transparency, communication, and collaboration.

This research study concludes that corporate strategy is developed with strategic supply chain elements (Research Issue 1 - Themes 1 to 4), and then is rolled out (Research Issue 2 - Themes 5 to 11) across the firm and strategic supply chains, to take advantage of strategic supply chain opportunities and to implement decisions to gain and sustain significant supply chain competitive advantages and superior supply chain performance. As identified by the additional insights provided in Theme 3 and **Appendix K**, this research study also concludes that the execution of corporate strategy also entails transforming supply chain performance by implementing strategic supply chain reconfiguration decisions.

5.4. Implications for theory

The previous section articulated the conclusions related to the research problem. This section explains the contribution to theory made by this research study and presents a revised theoretical framework.

5.4.1. Revised Theoretical Framework

As result of the findings of this research study, amendments have been made to the original theoretical framework (**Figure 2.2**) that was presented as an outcome of the literature review in Chapter 2. A key output of this research study is the revised theoretical framework presented in **Figure 5.3**. This research study linked the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* by applying Dynamic Capabilities Theory. The revised theoretical framework conceptually presents a way of *bringing corporate strategy to life* for B2B firms through firm-wide and strategic supply chain performance alignment to perform as required within strategic supply chains, to gain and sustain competitive advantage and superior performance utilising dynamic capabilities.

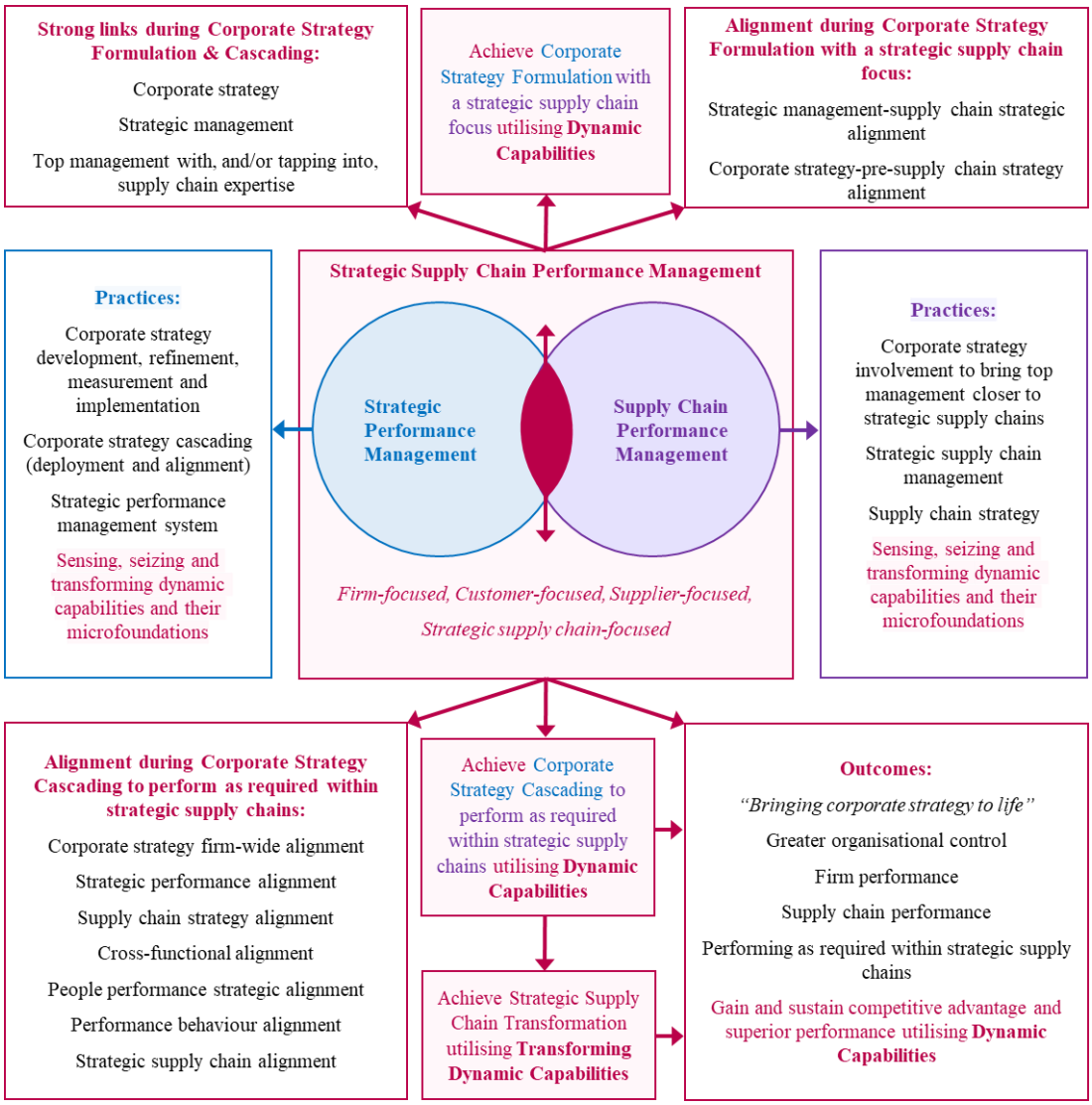

Figure 5.3: Revised Theoretical Framework

In this research study the *supply chain performance management* domain was the primary topic and the *strategic performance management* domain was the secondary topic. As a result of the research findings, linking the two major domains, and applying the Dynamic Capabilities Theory, this research study advanced the body of knowledge of the two major domains and the Dynamic Capabilities Theory. The research gaps identified in the original theoretical framework (**Figure 2.2**) presented in Chapter 2, have been addressed regarding the *supply chain performance management* domain and the *strategic performance management* domain as identified in **Table 5.4**.

Table 5.4: Research gaps addressed from the original theoretical framework

Research gaps identified in original Theoretical Framework (Figure 2.2)			**Links established with**
Supply Chain Performance Management	Limited research	**Top management's supply chain-related role**	*Strategic Performance Management* Dynamic Capabilities Theory
	Limited research	**Supply chain's role** in corporate strategy formulation	
	Unclear link	**Supply chain's** link with strategic management	
Strategic Performance Management	Unclear link	**Supply chain** link with *strategic performance management* domain	*Supply Chain Performance Management* Dynamic Capabilities Theory
	Unclear link	**Supply chain strategy** link with *strategic performance management* domain	
	Unclear link	**Suppliers** link with *strategic performance management* domain	
	Limited research	**Corporate strategy cascading**	
Dynamic Capabilities Theory	Limited research	**Sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities** associated with corporate strategy formulation with a strategic supply chain focus and corporate strategy cascading to perform as required within strategic supply chains, at top performing B2B firms in Australia.	*Strategic Performance Management* *Supply Chain Performance Management*

The revised theoretical framework (**Figure 5.3**) is explained in the following sections and contributions to body of knowledge and the Dynamic Capabilities Theory are summarised.

5.4.2. *Supply chain performance management*

In the extant *supply chain performance management* literature, researchers agree that improvements to supply chain management practices leads to improving the performance of supply chains and the firm (Al-Shboul et al. 2017; Deshpande 2012; Gandhi et al. 2017; Gorane & Kant 2017; Park et al. 2017; Ramezankhani et al. 2018; Truong et al. 2017). The supply chain is the firm's greatest driver of competitiveness (Bolstorff & Rosenbaum 2012; Deshpande 2012; Gonzalez-Loureiro et al. 2015; Lambert et al. 2010; Lambert 2014; Ramezankhani et al. 2018) however little research linked *supply chain performance management* with *strategic performance management* to identify strategic level decisions made by top management that directly impact *supply chain performance management*, until now.

Top management's supply chain-related role. This research study advances knowledge about top management's important role in the strategic planning of the firms' strategic supply chains and in the management of strategic supply chain relationships with strategic suppliers and strategic customers, as previously, little was known about their supply chain-related role (Sandberg & Abrahamsson 2010; Wagner & Kemmerling 2014). The findings of this research study do not support the view that

top management lack dedication in *supply chain performance management* or that there is inadequate strategic planning in *supply chain performance management* (Katiyar, cited in Wankhade & Kundu 2018, p. 224), and are considered an advance in knowledge. This research study confirms that top management are dedicated to *supply chain performance management* from a strategic planning perspective. Top management has a strategic planning role in strategic supply chain management during corporate strategy formulation because they know that incorporating strategic supply chain considerations into corporate strategy drives value and firm growth. The strategic performance management process is used to develop the corporate strategy (de Waal 2013) and the supply chain performance management process is used to monitor and improve the effectiveness of supply chain strategies to achieve a competitive advantage (Ramezankhani et al. 2018; Roh et al. 2014; Stefanovic 2014). Using dynamic capabilities, top management incorporate strategic supply chain considerations into corporate strategy to ***seize*** strategic supply chain opportunities and performance objectives, by ***sensing*** the requirements of strategic supply chains, to ***transform*** the firm and strategic supply chain operations to be capable of seizing the opportunities, to gain and sustain significant supply chain competitive advantages and superior supply chain performance. The *supply chain performance management* and *strategic performance management* domains are linked through the corporate strategy formulation process when the firm has strategic supply chain considerations. Top management recognise strategic supply chains as critical to business success, and value supply chain knowledge and expertise in the top management team as well as participation from key personnel from cross-functional areas, especially key supply chain-focused personnel. During corporate strategy formulation, together with key personnel, top management plan and make strategic decisions about strategic supply chain strategies, strategic supply chain configuration (including supply chain network and technology) and strategic supply chain performance objectives, which also advances knowledge in *supply chain performance management*. Sabri et al. (2017, p. 52) identified that the merging of supply chain configuration and supply chain performance 'streams of research is not full employed'. This research study linked supply chain configuration and *supply chain performance management* and contributed to knowledge regarding the strategic supply chain configuration decisions made by executives to gain and sustain competitive advantage and superior

performance. During execution of the corporate strategy, top management participate on cross-functional management groups to examine at how customers and suppliers are being serviced and are involved in the management of major strategic supply chain relationships to ensure transparency and that the mutual needs of relationships are met. The strategic performance management process requires the role of top management to be defined regarding corporate strategy planning, development, deployment and execution monitoring (de Waal 2013). Enabled by Dynamic Capabilities Theory, this research study contributes knowledge to the two major domains by contributing to the understanding top management's supply chain-related role in corporate strategy formulation and execution.

Supply chain's role in corporate strategy formulation and link with strategic management. Until now, very little research focused on supply chain management as a key element in corporate strategy (Gonzalez-Loureiro et al. 2015). Linkages and alignment are established between strategic management and supply chain during corporate strategy formulation through the consideration of strategic supply chain management and performance requirements, which advances knowledge in this under-researched area (Gonzalez-Loureiro et al. 2015; Hofmann 2010; Sandberg & Abrahamsson 2010; Wagner & Kemmerling 2014). Until now, little was known about supply chain executives' role in top management teams (Sandberg & Abrahamsson 2010; Wagner & Kemmerling 2014) and about their role in strategic level planning at the highest level of the organisation (Deshpande 2012; Hofmann 2010; Hwang 2010). This research study contributes to knowledge that key supply chain-focused personnel, especially within leadership or executive positions, play an important role with top management during corporate strategy formulation to incorporate strategic supply chain opportunities, decisions, strategies, solutions, performance objectives, and improvement programs into corporate strategy. Key supply chain-focused personnel provide top management with a strategic supply chain lens and help them to navigate complex supply chains and prepare top management to manage the unexpected in the external environment and across local and global markets. As indicated in the revised theoretical framework (**Figure 5.3**), *supply chain performance management* practices include corporate strategy involvement – by key supply chain-focused personnel – to bring top management closer to strategic supply chains. These findings were identified as *transforming microfoundations* of dynamic capabilities, advancing knowledge in

Dynamic Capabilities Theory. The extant literature regarding *supply chain performance management* made strategic-level references to firm performance (Alomar & Pasek 2014; Cvetic & Vasiljevic 2012; Elrod et al. 2013; Gandhi et al. 2017; Gorane & Kant 2017; Stefanovic 2014) but there was very little mention of *strategic performance management*. This research study has firmly established a link between the two major domains. Enabled by Dynamic Capabilities Theory, this research study contributes knowledge to the two major domains about supply chain's role in corporate strategy formulation and the supply chain link with strategic management. As indicated in the revised theoretical framework (**Figure 5.3**), alignment during corporate strategy formulation with a strategic supply chain focus was establish through the findings that enabled the identification of *transforming dynamic capabilities* which this research study named 'strategic management-supply chain strategic alignment'.

5.4.3. *Strategic performance management*

Strategic performance management plays a critical role in firm performance to gain a competitive advantage (Striteska & Jelinkova 2015), which made it the perfect domain to establish a link with *supply chain performance management* which plays a critical role in both firm and supply chain performance to gain a competitive advantage (Ramezankhani et al. 2018; Roh et al. 2014; Stefanovic 2014).

<u>*Supply chain link with strategic performance management domain*</u>. A gap was discovered in the extant literature reviewed regarding *strategic performance management* with no references in relation to supply chain during corporate strategy formulation. This research study closed the gap in the extant literature reviewed regarding *strategic performance management* by linking supply chain with the corporate strategy formulation process, a process that is supported by the strategic performance management process (de Waal 2013). Strategic supply chain considerations are incorporated into corporate strategy because of the linkage and alignment between strategic management and the supply chain requirements of the firm. Key supply chain-focused personnel help top management to make strategic supply chain decisions and help top management to understand the end-to-end supply chain impact of the decisions. The *strategic performance management* literature also demonstrated that this domain applies a customer focus (Adler 2011; Chau 2008; de

Waal & Kourtit 2013; Franco-Santos et al. 2012; Marr 2006) however there were no references regarding how the supply chain is linked with this domain regarding applying a customer focus. This research study strengthens the customer focus applied by the *strategic performance management* domain through findings regarding the development and incorporation of customer-focussed supply chain strategies into corporate strategy, which contributed to knowledge in both major domains.

This research study also closed the gap in the extant literature reviewed regarding *strategic performance management* by linking supply chain with the corporate strategy cascading process, a process which is governed by the strategic performance management process (de Waal 2013). Corporate strategy rollout includes the deployment of corporate strategy with a strategic supply chain focus. Strategic performance alignment includes the rollout and alignment of supply chain costs, supply chain KPIs and strategic and operational supply chain goals to corporate strategy. Strategic performance management system technology is used to monitor, and report firm and supply chain performance and the technology is upgraded to improve visibility of firm performance within the supply chain and visibility of supply chain performance. Cross-functional relationships and alignment span across supply chain teams and business functions, in alignment with achieving corporate strategy objectives. In addition, executives master strategic supply chain relationships and alignment with strategic customers and strategic suppliers by constantly reviewing performance, identifying changing needs, technology and compliance requirements, and by improving supply chain visibility and competitiveness across the supply chain, to achieve corporate strategy objectives. Enabled by Dynamic Capabilities Theory, this research study contributes to knowledge by linking the supply chain, and especially *supply chain performance management*, to the *strategic performance management* domain.

Supply chain strategy link with strategic performance management domain. A firm's supply chain strategy specifies 'how a firm will achieve its competitive advantages through its supply chain capabilities such as cost efficiency, response speed, and flexibility' (Qi et al. 2011, p. 372). *Supply chain performance management* creates 'a consistent relationship between supply chain strategy, planning, implementation, and controlling' (Stefanovic 2014, p. 1) and monitors the effectiveness of the supply chain

strategy to support the corporate strategy (Cohen & Roussel 2013; Elrod et al. 2013; Ramezankhani et al. 2018; Roh et al. 2014; Stefanovic 2014). The supply chain strategy is highly important to the performance of B2B firms in strategic supply chains, however there were no references to 'supply chain strategy' or where it fits in relation to the corporate strategy, in the *strategic performance management* literature. This research study closed this research gap through the findings which identified that the involvement of key supply chain-focused personnel during corporate strategy formulation enables the initial alignment of supply chain requirements to corporate strategy, from which enables the formulation of an aligned-supply chain strategy post development of the corporate strategy. It is important to align the supply chain strategy with the corporate strategy, but this alignment commences pre-supply chain strategy during corporate strategy formulation with the involvement of key supply chain-focused personnel. These research findings advanced the body of knowledge of both major domains. As indicated in the revised theoretical framework (**Figure 5.3**), alignment during corporate strategy formulation with a strategic supply chain focus was established through the findings that enabled the identification of *transforming dynamic capabilities* which this research study named 'corporate strategy-pre-supply chain strategy alignment'. This study also links supply chain strategy with the *strategic performance management* domain, and links the two major domains, during corporate strategy cascading, including through alignment of the supply chain strategy to corporate strategy, as indicated in the revised theoretical framework (**Figure 5.3**). Enabled by Dynamic Capabilities Theory, this research study contributes to knowledge by linking the supply chain strategy and *supply chain performance management* to the *strategic performance management* domain.

Suppliers link with strategic performance management domain. Suppliers significantly impact a firm's strategic supply chains, internal operations and almost everything a firm does, but there was *very* little mention of suppliers within the extant *strategic performance management* literature reviewed. The literature review identified that the strategic performance management process uses the Balanced Scorecard, however de Waal (2013, p. 143) argued that the Balanced Scorecard is mostly criticised due to its 'imbalance in the number of stakeholders that is accounted for' and that 'suppliers are absent from the scorecard'. This issue could be a contributing factor of the customer/supplier-focus imbalance in the *strategic performance management* domain.

The extant literature reviewed regarding *supply chain performance management* also found no references in relation to supplier-related supply chain decisions and plans into corporate strategy even though supply chain management demonstrated a strong supplier focus (Cook et al. 2011; Gandhi et al. 2017; Gorane & Kant 2017; Wankhade & Kundu 2018). This research study closed the 'supplier' research gaps through the corporate strategy formulation findings which identified that a significant focus is applied on strategic suppliers when developing and incorporating supplier-focussed supply chain strategies into corporate strategy, in addition to supplier-related supply chain configuration decisions and performance objectives. Supplier-related supply chain decisions and plans are incorporated into corporate strategy to improve the competitiveness of the firm and the supply chain from supplier to customer, and to ensure that the firm gains and sustains significant supply chain competitive advantages.

This research study also closed the 'supplier' research gaps through the corporate strategy cascading findings. During corporate strategy cascading and strategic performance alignment, KPIs pertaining to managing the performance of contractors, product quality, suppliers, and supplier lead times are aligned with corporate strategy. Strategic performance management system technology is used to measure, monitor, and report supplier performance and spend. Top management are assigned to participate on cross-functional management groups to examine the servicing of suppliers due to their link with the firm's financial performance. In alignment with corporate strategy and to help the firm achieve its strategic objectives, executives master supplier relationship management with strategic suppliers and manage supply chain risks and threats. These research findings advanced the body of knowledge of both major domains. Enabled by Dynamic Capabilities Theory, this research study contributes to knowledge by linking suppliers with the *strategic performance management* domain. As indicated in the revised theoretical framework (**Figure 5.3**), the linking of *strategic performance management* and *supply chain performance management* enables a B2B firm to be firm-focused, customer-focused, supplier-focused and strategic supply chain-focused.

Corporate strategy cascading. There was limited empirical research on corporate strategy cascading within the extant *strategic performance management* literature

reviewed, as well as strategy cascading approaches suitable for successful corporate strategy cascading. Schlickel (2013) also reported that little research was available on strategy cascading. Enabled by Dynamic Capabilities Theory, this research study advances knowledge on the corporate strategy cascading process which is summarised in Section 5.3.2 in relation to Themes 5 to 11 as a result of this research study. This research study links corporate strategy cascading with strategic performance management systems, and contributes knowledge that these systems are used to facilitate corporate strategy cascading, as there was limited research in the literature reviewed addressing using these systems for corporate strategy cascading and the associated cascading of metrics and KPIs. This research study also contributes knowledge regarding cross-functional relationship management and alignment as researchers identified that more research was required regarding how firms achieve cross-functional alignment (Cuthbertson & Piotrowicz 2011; Deshpande 2012).

This research study builds upon de Waal's (2013) three-staged approach to establishing a strategic performance management system. De Waal's (2013, p. 30) three stages includes: designing a strategic management model, designing a strategic reporting model and designing a performance-driven behavioural model. De Waal's stage one could be further advanced by addressing corporate strategy cascading and by including strategic supply chain considerations; top management's supply chain-related role; setup of strategic performance management system technology; and getting the firm and the corporate strategy cascading process technology-ready, knowledge-ready, and process-ready. De Waal's stage two could be further advanced by: considering strategic supply chain performance objectives and metrics; replacing use of the Balanced Scorecard with a firm-wide performance scorecard that also includes supplier-facing and customer-facing KPIs, to prevent a customer-only focused scorecard; moving setup of the technology architecture for the strategic performance management system into stage one as this is a pre-requisite to a successful corporate strategy cascade. De Waal's stage three could be further advanced by renaming to 'designing a performance-driven model' and by adding performance-driven strategies including supply chain strategy alignment, team performance alignment, cross-functional alignment, proactive performance behavioural strategies identified in Section 5.2.2.6 (Theme 10 Addressing Behavioural Issues) and strategic supply chain alignment.

Akhtar (2018) identified that there was little research regarding the success of *strategic performance management* implementation or critical success factors. This research study has identified how executives successfully implement *strategic performance management* through corporate strategy formulation and corporate strategy cascading, as summarised in Section 5.3.2. Based on research findings and as depicted in **Figure 5.4**, there are seven key components for successful corporate strategy cascading for B2B firms with or without a strategic supply chain focused-corporate strategy.

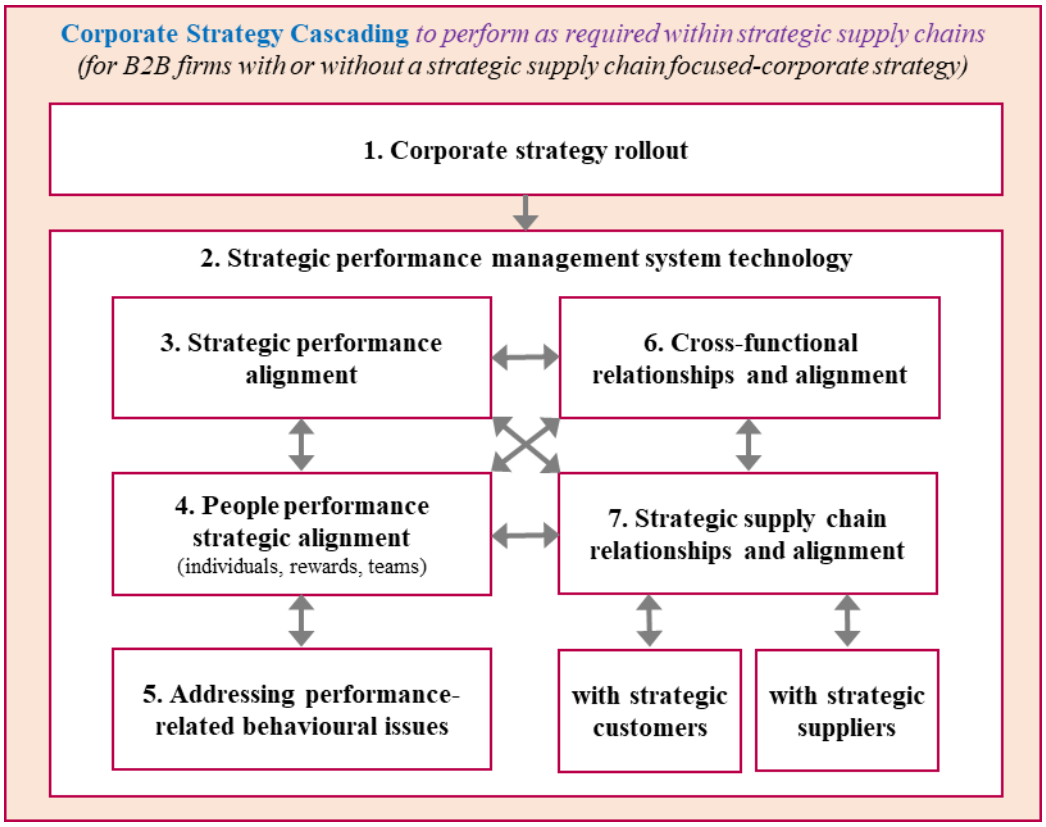

Figure 5.4: Key Components of Corporate Strategy Cascading

Executives ensure that the firm is ready for the corporate strategy cascade to ensure cascade and alignment success. Firms that are technology-ready, knowledge-ready, and process-ready, commence the corporate strategy cascade using *seizing dynamic capabilities*. Firms that are not technology-ready and/or knowledge-ready use *transforming dynamic capabilities* to get cascade-ready to transform relevant technology and knowledge. Firms that are not process-ready use *sensing dynamic capabilities* to get cascade-ready by detecting process issues. These findings advance

knowledge in *strategic performance management* regarding corporate strategy cascading and Dynamic Capabilities Theory.

The revised theoretical framework presented in **Figure 5.3** lists the alignment that occurs during corporate strategy cascading, to perform as required within strategic supply chains. Using *transforming dynamic capabilities*, firm-wide strategic alignment to corporate strategy entails the development and alignment of business plans and budgets, strategic performance alignment, supply chain strategy alignment, cross-functional alignment, people performance strategic alignment (individual, rewards and teams), performance behaviour alignment and strategic supply chain alignment. These findings advance knowledge in *strategic performance management* regarding, corporate strategy cascading and Dynamic Capabilities Theory. As indicated in the revised theoretical framework (**Figure 5.3**), this research study also identified that the execution of corporate strategy also entails transforming the supply chain by implementing strategic supply chain configuration decisions.

In addition, the literature review identified that no definition in the extant literature reviewed specifically existed for corporate strategy cascading. **This research study proposes the following definition for corporate strategy cascading** that is appropriate for firms in strategic relationships with strategic customers and/or strategic suppliers:

> Corporate strategy cascading is the process of deployment and strategic alignment of corporate strategy to achieve firm-wide alignment including strategic performance alignment, cross-functional alignment, people performance strategic alignment and performance behaviour alignment; and to achieve strategic supply chain performance alignment with strategic supply chain partners.

The definition for corporate strategy cascading advances the *strategic performance management* body of knowledge. The supply chain function within the firm or alignment with the supply chain strategy was intentionally not mentioned in this definition of corporate strategy cascading since this definition does not identify any other organisational functions and strategies within the firm that are also important to the firm's success.

5.4.4. Dynamic Capabilities Theory

This research study responded to the call for greater research attention to investigate whether other management constructs and complementary fields of enquiry exhibit dynamic capabilities in organisational contexts (Ambrosini & Bowman 2009; Vijaya et al. 2019) and to investigate the microfoundations of dynamic capabilities process dimensions of sensing, seizing and transforming (Schilke et al. 2018). This research study addressed a gap where there was limited research, using the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* that were ideal management constructs and complementary fields of enquiry to identify whether sensing, seizing, and transforming dynamic capabilities and their microfoundations, were found in organisational contexts relevant to these domains. Firms that are seeking to achieve and sustain superior enterprise performance must develop dynamic capabilities (Blome et al. 2013; Kleinbaum & Stuart 2014; Li et al. 2015; Pezeshkan et al. 2016; Pitelis & Wagner 2019; Teece 2019; Torres et al. 2018; Vanpoucke et al. 2014; Vijaya et al. 2019). This research study identified that sensing, seizing, and transforming dynamic capabilities and microfoundations of dynamic capabilities are associated with corporate strategy formulation with a strategic supply chain focus and corporate strategy cascading to perform as required within strategic supply chains. This research study advanced knowledge in Dynamic Capabilities Theory and linked this theory with the two major domains. This theory was the perfect match for this research study which confirmed that the two major domains and this theory all have strong links with strategic management (link now established with supply chain), competitive advantage, superior performance and the internal and external views (supply chain link now established with *strategic performance management*) of the business environment. This research study identified that executives and their top performing B2B firms are intensely entrepreneurial, develop unique and difficult-to-replicate capabilities, have the capability to learn and to adjust, collaborate with strategic supply chain partners and use innovation to adapt and shape their business ecosystems (Teece 2009, 2019). These dynamic capabilities were developed through microfoundations of dynamic capabilities that helped the executives and their firms to build and evolve dynamic capabilities (Fallon-Byrne & Harney 2017). The findings in Section 4.2, the conclusions and discussion in Section 5.2 and Section 5.3.1, and **Appendices I, J** and **K**, identify the contributions to

Dynamic Capabilities Theory by this research study. As indicated in the revised theoretical framework (**Figure 5.3**), to gain and sustain competitive advantage and superior performance, executives at B2B firms operating in strategic supply chains, must utilise sensing, seizing and transforming dynamic capabilities, developed through their microfoundations, to achieve, corporate strategy formulation with a strategic supply chain focus, corporate strategy cascading to perform as required within strategic supply chains, and strategic supply chain transformation, through *strategic performance management* and *supply chain performance management*.

5.4.5. Linking the two major domains through a new term

Until this research study, there was limited research available that linked the two major domains *Strategic Performance Management* and *Supply Chain Performance Management*. Through exploration of corporate strategy formulation and cascading processes with a strategic supply chain performance focus, this research study established strong links between the two major domains and with Dynamic Capabilities Theory, corporate strategy, strategic management, and top management who have or tap into supply chain expertise – as indicated in the revised theoretical framework (**Figure 5.3**). The findings in this research have advanced the body of knowledge of the two major domains and Dynamic Capabilities Theory.

This research study concludes that strategic supply chain elements are linked with corporate strategy formulation, corporate strategy cascading, strategic supply chain performance transformation, firm performance, and supply chain performance. *Strategic performance management* enables greater organisational control (de Waal & Kourtit 2013; Neely 2008) however *supply chain performance management* enables greater reach across strategic supply chains to enhance the firm's competitive advantage. This research study suggests that from a performance management perspective, these two highly-competitive-focused performance-driven domains could be merged, for B2B firms operating in strategic supply chains. In consideration of the gaps in the literature addressed by this research study and the strong links established between the two major domains, **this research study proposes a new term named 'strategic supply chain performance management'** to guide B2B firms to remain firm-focused, customer-focused, supplier-focused, and strategic supply chain-focused when establishing, implementing and managing strategic supply chain requirements

and performance objectives. This research study addressed strategic supply chain performance management from a top-down inside-out perspective. No term or definition in the extant literature reviewed existed for strategic supply chain performance management until now. Inspired by de Waal's (2013) definition of *strategic performance management* and based on the findings of this research study, **the following definition for strategic supply chain performance management is proposed** for B2B firms operating in strategic supply chains:

> Strategic supply chain performance management is the process in which guiding of the firm takes place through the incorporation of strategic supply chain elements into corporate strategy, making these measurable, ensuring firm-wide and strategic supply chain performance alignment, while taking strategy-aligned preventive and corrective actions internally and externally, and using dynamic capabilities to sustain competitive advantage, superior performance, and to ensure that the firm performs as required within its strategic supply chains.

The new term and definition for strategic supply chain performance management advances the body of knowledge of the two major domains and plays a central role as indicated in the revised theoretical framework (**Figure 5.3**) to ensure that B2B firms perform as required within strategic supply chains.

5.5. Implications for practice

The previous section explained the contribution to theory made by this research study and presented a revised theoretical framework. This section explains the contribution to practice made by this research study and presents an outline of a Strategic Supply Chain Performance Management Framework.

5.5.1. Strategic Supply Chain Performance Management Framework

The scope of this research study investigated and explored the intersection of the two major domains *Strategic Performance Management* and *Supply Chain Performance Management* using Dynamic Capabilities Theory. In the literature and in practice at B2B firms, 'firm performance' and 'supply chain performance' are referred to as two separate topics and practices and are also referred to interchangeably. A B2B firm in strategic supply chain relationships, is one part of a strategic supply chain. This research study proposes that instead of referring to both terms separately and/or

interchangeably, that B2B firms operating in strategic supply chains use the term 'strategic supply chain performance management' in recognition of the performance required by all parties and each party in the strategic supply chain. This research study recognises strategic supply chain performance management as a dynamic capability.

Based on the findings of this research study, the two major domains and application of the Dynamic Capabilities Theory, a key output of this research study resulted in the outline of a Strategic Supply Chain Performance Management (SSCPM) Framework, which is considered an advance in knowledge. **Table 5.5** outlines the SSCPM Framework which identifies three levels, where Level 3 outlines the key components resulting from the research issues, research findings, the literature, key themes, dynamic capabilities and microfoundations of dynamic capabilities.

Table 5.5: Outline of Strategic Supply Chain Performance Management Framework

Level 1	Level 2	Level 3 - Key Components
1.0 Corporate Strategy Formulation – *a strategic supply chain focus*	CSF.1.1 Strategic management-supply chain strategic alignment	CSF.1.1.1 Top management recognition of value of strategic supply chains CSF.1.1.2 Strategic planning with strategic supply chain-focused personnel CSF.1.1.3 Strategic supply chain considerations CSF.1.1.4 Pre-supply chain strategy alignment
	CSF.1.2 Strategic supply chain strategies development	CSF.1.2.1 Strategic supply chain strategies CSF.1.2.2 Strategic customer-focussed supply chain strategies CSF.1.2.3 Strategic supplier-focussed supply chain strategies
	CSF.1.3 Strategic supply chain configuration decision-making and planning	CSF.1.3.1 Strategic supply chain configuration planning CSF.1.3.2 Supply chain network decisions and planning CSF.1.3.3 Manufacturing decisions and planning CSF.1.3.4 Supplier network decisions and planning CSF.1.3.5 Enterprise-wide IT and decision support systems decisions and planning CSF.1.3.6 Supply chain technology decisions and planning CSF.1.3.7 Supply chain data integration technology decisions and planning
	CSF.1.4 Strategic supply chain performance objectives development	CSF.1.4.1 Monitoring threats to strategic supply chain performance CSF.1.4.2 Strategic supply chain performance opportunities identification CSF.1.4.3 Technology-enhancing strategic supply chain performance opportunities CSF.1.4.4 Strategic supply chain performance impact of CSF.1.2 and CSF.1.3 CSF.1.4.5 Strategic supply chain performance objectives decisions
2.0 Corporate Strategy Cascading – *to perform as required within strategic supply chains*	CSC.2.1 Corporate strategy rollout	CSC.2.1.1 Corporate strategy firm-wide communication CSC.2.1.2 Corporate strategy firm-wide deployment and strategic alignment CSC.2.1.3 Business plans and budgets development and strategic alignment
	CSC.2.2 Strategic performance alignment	CSC.2.2.1 Rollout and alignment of relevant financial KPIs and non-financial KPIs CSC.2.2.2 Translation of strategic KPIs to operational KPIs CSC.2.2.3 Firm-wide performance scorecard alignment CSC.2.2.4 Organisational performance process governance CSC.2.2.5 Supply chain strategy alignment to corporate strategy CSC.2.2.6 Supply chain cost alignment to corporate strategy
	CSC.2.3 Strategic performance management system technology	CSC.2.3.1 Performance system technology training CSC.2.3.2 Corporate strategy cascading via performance system technology CSC.2.3.3 Firm and supply chain performance monitoring and reporting CSC.2.3.4 Performance system technology requirements/upgrade via SSCPT.3.3
	CSC.2.4 Cross-functional performance alignment	CSC.2.4.1 Strategic management-cross-functional relationships and alignment CSC.2.4.2 Mobilising cross-functional teams and champions CSC.2.4.4 Cross-functional stakeholder management CSC.2.4.3 Cross-functional process performance management CSC.2.4.5 Cross-functional collaboration and continuous improvement CSC.2.4.6 Cross-functional collaboration technology utilisation

Level 1	Level 2	Level 3 - Key Components
	CSC.2.5 People performance strategic alignment	CSC.2.5.1 Individual performance objectives to deliver corporate strategy CSC.2.5.2 Individual performance strategic alignment CSC.2.5.3 Individual performance strategic alignment using performance system technology CSC.2.5.4 People development strategic alignment CSC.2.5.5 Team performance objectives to deliver corporate strategy CSC.2.5.6 Team performance strategic alignment CSC.2.5.7 Performance rewards system
	CSC.2.6 Strategic performance behaviour alignment	Strategic performance management system and related technology: CSC.2.6.1 Behavioural issues sensing CSC.2.6.2 Proactive behavioural strategies to enhance performance outcomes CSC.2.6.3 Performance system and technology training via CSC.2.3.1 CSC.2.6.4 Building loyalty and commitment through values and culture alignment
	CSC.2.7 Strategic supply chain performance alignment with strategic customers	CSC.2.7.1 Strategic customer relationship management CSC.2.7.2 Strategic customer process integration via SSCPT.3.3 and SSCPT.3.4 CSC.2.7.3 Strategic customer supply chain performance management CSC.2.7.4 Strategic customer changing needs monitoring CSC.2.7.5 Strategic customer external environment monitoring
	CSC.2.8 Strategic supply chain performance alignment with strategic suppliers	CSC.2.8.1 Strategic supplier relationship management CSC.2.8.2 Strategic supplier process integration via SSCPT.3.3 and SSCPT.3.4 CSC.2.8.3 Strategic supplier supply chain performance management CSC.2.8.4 Strategic spend monitoring CSC.2.8.5 Strategic supplier external environment monitoring CSC.2.8.6 Strategic supply chain risk management
3.0 Strategic Supply Chain Performance Transformation – *for superior competitive advantage*	SSCPT.3.1 Strategic supply chain network performance transformation	SSCPT.3.1.1 Strategic supply chain reconfiguration SSCPT.3.1.2 Manufacturing transformation SSCPT.3.1.3 Outsourcing transformation SSCPT.3.1.4 Supply chain rationalisation SSCPT.3.1.5 Supply chain resources transformation
	SSCPT.3.2 Best practice performance transformation	SSCPT.3.2.1 Enterprise best practice process transformation SSCPT.3.2.2 Strategic supply chain practices transformation
	SSCPT.3.3 Enterprise technology performance transformation	SSCPT.3.3.1 Enterprise technology capability transformation SSCPT.3.3.2 Enterprise technology upgrade management SSCPT.3.3.3 Enterprise technology outsourcing SSCPT.3.3.4 Enterprise technology change management
	SSCPT.3.4 Strategic supply chain technology performance transformation	SSCPT.3.4.1 Supply chain technology transformation SSCPT.3.4.2 Supply chain data and process integration management SSCPT.3.4.3 Supply chain technology change management

The SSCPM Framework outline is a valuable contribution to practice as it provides executives at B2B firms, and their strategic supply chain partners, with a guide to consider the key components when formulating a corporate strategy with a strategic supply chain focus, when cascading corporate strategy to perform as required within strategic supply chains, and when undertaking strategic supply chain performance transformation to achieve and sustain superior competitive advantage. The summary provided in Section 5.3.2 regarding how executives have successfully implemented corporate strategy formulation and corporate strategy cascading with a strategic supply chain performance focus, can be used as a high level guide regarding how to implement the SSCPM Framework in practice.

The SSCPM Framework outline is intended to guide executives at B2B firms to:

- close the gap between corporate strategy formulation and corporate strategy execution, to become and remain a top performing B2B firm
- bring top management closer to the strategic supply chain, commencing from corporate strategy formulation
- *bring corporate strategy to life* through firm-wide and strategic supply chain performance alignment
- ensure that their firm performs as required within strategic supply chains
- sustain competitive advantage and superior performance long-term utilising dynamic capabilities.

This research study also designed the SSCPM Framework Cycle in **Figure 5.5** which illustrates that the SSCPM Framework is a continuous cycle to ensure that a B2B firm achieves and continuously sustains competitive advantage and superior performance utilising dynamic capabilities. The SSCPM Framework Cycle is considered an advance in knowledge.

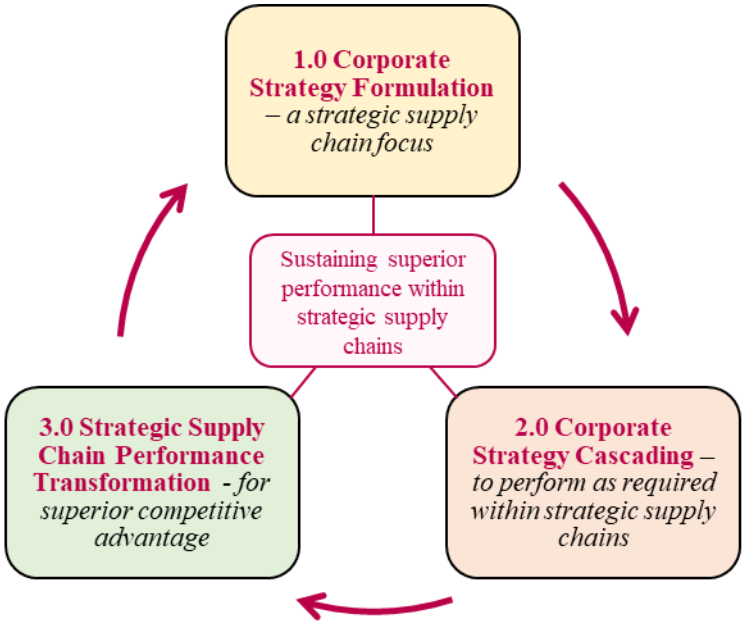

Figure 5.5: Strategic Supply Chain Performance Management Framework Cycle

5.6. Limitations of the research

The previous section explained the contribution to practice made by this research study and presented an outline of a SSCPM Framework. This section outlines the limitations of this research. Qualitative research has several limitations, and it is important for researchers to reflect on the limitations of their research (Rowley 2014, p. 328).

Limited number of research participants. Data collection for this research was conducted with 30 research participants. The data collection techniques most often used for interpretivism research involves a small number of research participants in qualitative in-depth investigations (Saunders et al. 2009). Patton (2002) and Saunders et al. (2009) explain that there are no rules regarding the number of research participants to involve in qualitative inquiry. This potential limitation is not considered significant as the Principal Investigator went to exhaustive efforts to find available industry experts that met the research participant selection criteria (Section 3.5.1) using purposeful criterion sampling (Patton 2002; Suri 2011). A justification of the sample size used in this research is provided in Section 3.6.

Industry characteristics and research paradigm. The main limitation of the research methodology is that the research findings cannot be statistically generalised to a population. The findings are not representative of the population of industry experts and executive perceptions, top performing B2B firms in Australia, any industry sector, firm size, or location. These limitations were not considered significant because this interpretative research study was not limited to specific industry sectors, because the aim of the study was not to explore the research problem (Section 3.3.2) with research participants employed in specific industry sectors. Any differences in the findings may have derived from using an interpretivism research paradigm which sought to understand the complex business world of the research participants from their point of view, where the nature of reality is subjective and contextual (Darby et al. 2019; Guba & Lincoln 1994; Saunders et al. 2009; Schwartz-Shea & Yanow 2012). The interpretivism research paradigm allowed this research study to build a framework of multiple realities (Darby et al. 2019; Guba & Lincoln 1994; Saunders et al. 2009) based on the perceptions, opinions, and perspectives of the research participants, which helped to identify the dynamic capabilities and microfoundations of dynamic

capabilities associated with the research issues which helped to facilitate resolution of the research problem.

Corporate strategy formulation. This research study limited investigation by focusing on corporate strategy formulation with a strategic supply chain focus, which is a potential limitation of this research but is not considered significant. This research study did not address all aspects of corporate strategy formulation that would normally be addressed by top management when developing a corporate strategy, because all aspects were not relevant to the research problem.

5.7. Directions for future research

This exploratory qualitative research study provides a research pathway and direction for future research. Future research could:

- be based on one industry sector to allow research outcomes to be tailored to that industry sector
- be based on a different research methodology and research paradigm, for example case study research using realism paradigm
- conduct a quantitative study to seek generalisation of the findings
- replicate the study in a different country context
- specifically explore and identify the dynamic capabilities and microfoundations of dynamic capabilities associated with major supply chain transformations to extend current research findings to explore how B2B firms achieve and sustain superior competitive advantage through major transformation activities
- address all aspects of corporate strategy formulation that are addressed by top management in complex changing business environments, to explore and identify the dynamic capabilities and microfoundations of dynamic capabilities associated with this process.

The next section concludes this research study.

5.8. Summary

This final chapter provided a discussion regarding the findings presented in Chapter 4, within the context of the literature review and presented conclusions. A summary of the contribution to knowledge made by this research study was provided. Conclusions

about the two research issues and about the research problem were provided. The contributions that this research study has made to theory and practice were explained and a revised theoretical framework was presented. The limitations of this research were outlined and directions for future research were provided.

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APPENDICES

Appendix A: Open-ended In-depth Questions

(Research Issue 1: Set 1; Research Issue 2: Sets 2-7)

Supply Chain Performance Management

The research problem being addressed is: *How do executives at top performing B2B firms in Australia form and cascade corporate strategy firm-wide to ensure that the firm performs as required within its strategic supply chains?*

Please describe your experience as an executive at a top performing B2B firm in Australia and please provide the firm name. Research output will be anonymised.

Set 1: Corporate Strategy & Strategic Supply Chain Performance Management

- S1Q1a How do executives at top performing B2B firms in Australia ensure that the corporate strategy incorporates strategic supply chain opportunities to ensure that the firm gains significant supply chain competitive advantages?
- S1Q1b Does technology play a role in the development of the corporate strategy or identification of strategic supply chain opportunities? If yes, please explain how. If no, please explain why not.
- S1Q2a How do executives at top performing B2B firms in Australia ensure that the corporate strategy incorporates strategic supply chain performance objectives to ensure that the firm performs as required within its strategic supply chains?
- S1Q2b Does technology play a role in the development of strategic supply chain performance objectives? If yes, please explain how. If no, please explain why not.

Set 2: Performance Management & Measurement System

- S2Q1 How do executives at top performing B2B firms in Australia use the performance management and measurement system to cascade and rollout corporate strategy and align metrics firm-wide?
- S2Q2 Does technology play a role in cascading and rolling out corporate strategy, aligning metrics firm-wide and metrics selection? If yes, please explain how. If no, please explain why not.
- S2Q3 Please describe the firm-wide performance scorecard that: illustrates how corporate strategy has been rolled out across the firm via its performance measurement system; identify metrics used; identify performance targets.

Set 3: Performance Management & Measurement System Technology

- S3Q1a How do executives at top performing B2B firms in Australia utilise technology to aid the development, implementation and maintenance of the firm-wide performance management and measurement system?
- S3Q1b How does the firm ensure that the technology is effective?
- S3Q1c How does the firm ensure that the technology is efficient?

Set 4: Performance Management & Measurement System Technology Issues

- S4Q1 What instrument issues have executives at top performing B2B firms in Australia encountered when developing, implementing, and maintaining the firm-wide performance management and measurement system (the instrument)? How have they adequately addressed these issues?
- S4Q2 Does technology play a role in addressing instrument issues? If yes, please explain how. If no, please explain why not.

Set 5: Performance Management & Measurement System Behavioural Factors

- S5Q1 What behavioural issues/factors have executives at top performing B2B firms in Australia encountered (or needed to consider) when developing, implementing, and maintaining the firm-wide performance management and measurement system? How did they adequately address these issues / factors?
- S5Q2 Does technology play a role in addressing behavioural factors? If yes, please explain how. If no, please explain why not.

Set 6: Intra-Firm Cross-Functional Relationship Management

- S6Q1 How do executives at top performing B2B firms in Australia master intra-firm relationship management to ensure organisational performance objectives are achieved? Your response may identify how functional managers approach managing cross-functional relationships if/when functions need to jointly manage cross-functional processes.
- S6Q2 Does technology play a role in managing cross-functional relationships? If yes, please explain how. If no, please explain why not.

Set 7: Inter-Firm Supply Chain Relationship Management

- S7Q1 How do executives at top performing B2B firms in Australia master inter-firm relationship management for cross-firm integrated processes to ensure strategic supply chain performance objectives are achieved? Your response may identify how functional managers approach managing cross-firm relationships if/when functions/firms need to jointly manage cross-firm integrated processes.
- S7Q2 Does technology play a role in managing cross-firm relationships? If yes, please explain how. If no, please explain why not.

Appendix B: Ethics approval

-----Original Message-----
From: human.ethics@usq.edu.au <human.ethics@usq.edu.au>
Sent: Monday, 29 October 2018 10:47 AM
Subject: [RIMS] USQ HRE - H18REA149 - Ethics Application Approval Notice (Expedited Review)

Dear Sharyn

I am pleased to confirm your Human Research Ethics (HRE) application has now been reviewed by the University's Expedited Review process. As your research proposal has been deemed to meet the requirements of the National Statement on Ethical Conduct in Human Research (2007), ethical approval is granted as follows.

Project Title: H18REA149 - Supply Chain Performance Management
Approval date: 29/10/2018
Expiry date: 17/07/2021
USQ HREC status: Approved with conditions

(a) responsibly conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal;
(b) advise the University (email: ResearchIntegrity@usq.edu.au) immediately of any complaint pertaining to the conduct of the research or any other issues in relation to this project which may warrant review of the ethical approval of this project;
(c) promptly report any adverse events or unexpected outcomes to the University (email: ResearchIntegrity@usq.edu.au) and take prompt action to deal with any unexpected risks;
(d) make submission for any amendments to the project and obtain approval prior to implementing such changes;
(e) provide a progress 'milestone report' when requested and at least for every year of approval;
(f) provide a final 'milestone report' when the project is complete.
(g) promptly advise the University if the project has been discontinued, using a final 'milestone report'.

Additional conditionals of approval for this project are:

(a) Nil.

Please note that failure to comply with the conditions of this approval or requirements of the Australian Code for the Responsible Conduct of Research, 2018, and the National Statement on Ethical Conduct in Human Research, 2007 may result in withdrawal of approval for the project.

If you have any questions or concerns, please don't hesitate to make contact with an Ethics Officer.

Congratulations on your ethical approval! Wishing you all the best for success!

Kind regards,
Human Research Ethics
University of Southern Queensland
Toowoomba – Queensland – 4350 – Australia
Ph: 07 4687 5703 – Ph: 07 4631 2690 – Email: human.ethics@usq.edu.au

Appendix C: Low risk research

-----Original Message-----
From: human.ethics@usq.edu.au <human.ethics@usq.edu.au>
Sent: Friday, 26 October 2018 9:37 AM
Subject: [RIMS] USQ HRE H18REA149 - Your HRE application has been referred for expedited review

Dear Sharyn

Project Title: H18REA149 - Supply Chain Performance Management

Your ethics application has been assessed as low-risk. As such, your ethics application has been referred to the University's Expedited Review process.

Once your ethics application has been reviewed, you will receive an email notification with advice on the review outcome.

Please allow 20 working days for the review to be undertaken prior to following up with an Ethics Officer.

Kindest regards,

Human Research Ethics
University of Southern Queensland
Toowoomba – Queensland – 4350 – Australia
Ph: 07 4631 2690 – Email: human.ethics@usq.edu.au

Appendix D: Invitation to participate in research study

Subject: Exclusive invite to participate in Doctoral Research - Supply Chain Performance Management

Dear <first name used>

I am exclusively inviting strategic-level experts to participate in my doctoral research for 30-60+ mins, and I thought you may be interested. I am involving experts with experience at top performing B2B firms in Australia to help me to address my research problem.

I would be honoured if you could participate, if you believe the research is relevant for you.

BENEFIT: In return you will receive a copy of the SSCPM approach I am building. The Strategic Supply Chain Performance Management (SSCPM) Approach will be a very valuable tool for CEOs and Managers (and supply chain partners) to successfully develop and rollout corporate strategy to ensure that their firm performs as required within its strategic supply chains.

If interested, you may participate:

- via Interview (Phone or Skype) or
- via MS Word document (attached) or
- online at https://surveys.usq.edu.au/<link>

I seek responses pertaining to your experience any time before 15 February 2019:

- Set 1: Corporate Strategy & Strategic Supply Chain Performance Management (4 questions)
- Set 2: Performance Management and Measurement System (3 questions)
- Set 3: Performance Management and Measurement System Technology (3 questions)
- Set 4: Performance Management and Measurement System Technology Issues (2 questions)
- Set 5: Performance Management and Measurement System Behavioural Factors (2 questions)
- Set 6: Intra-Firm Cross-Functional Relationship Management (2 questions)
- Set 7: Inter-Firm Supply Chain Relationship Management (2 questions)

The attached Participant Information Sheet provides more information.

If you wish to participate, I will send you a Consent Form for signature.

If you do not wish to participate, that is absolutely fine.

Many thanks and I look forward to hearing from you soon.

Regards
Sharyn Grant

Appendix E: Participant Information – Interview

University of Southern Queensland

Participant Information for USQ Research Project Interview

Project Details

Title of Project: **Supply Chain Performance Management**

Human Research Ethics Approval Number: H18REA149

Research Team Contact Details

Principal Investigator Details

Ms Sharyn Grant
Email: […]
Mobile: […]

Supervisor Details

Professor Jeffrey Soar
Email: […]
Mobile: […]

Description

This project is being undertaken as part of a Doctoral Research Project. The Thesis is titled "Bringing corporate strategy to life through firm-wide alignment of strategic supply chain performance objectives".

The purpose of this project is to identify how executives at top performing firms in Australia cascade and rollout the corporate strategy and achieve alignment firm-wide to ensure that the firm performs as required within its strategic supply chains.

Participation

This research study seeks the participation of industry experts with:

1. Expertise in: (a) corporate strategy and/or (b) strategic supply chain management and/or (c) performance measurement systems and/or associated technology and/or (d) cross-functional relationship management and/or inter-firm relationship management; and
2. Experience and knowledge of firms in Australia with the following characteristics:

Firm Size	Firms with annual revenue greater than $100 million.
Nature of Business	Firms from any industry which have: a significant reliance on their inbound and/or outbound supply chains; and have strategic B2B relationships with key business suppliers and/or key business customers.
Top Performing	Firms considered to be top performing or best-in-class due to their consistency in increasing profit, or increasing revenue, or optimising costs, or achieving other superior levels of performance.
Corporate strategy	Firms that have: • aligned their corporate strategy to the performance requirements of strategic supply chains and/or • aligned their strategic supply chain performance objectives with their corporate strategy and/or • rolled out their corporate strategy across the firm (typically via their performance system)
Firm-wide performance measurement system	Firms that have a firm-wide performance measurement system that: • uses metrics that are aligned across the firm and are aligned to the corporate strategy and/or • is enabled by innovative performance management technology

Your participation will involve participation in one Skype interview for a duration of approximately **30-60 minutes**, anytime during **December 2018 or January 2019 (or before 15 February 2019)**. If you would prefer to complete an online questionnaire, please contact the Principal Investigator.

Questions are based on the following areas, but you only need to respond to questions pertaining to your expertise and experience:

- Corporate strategy
- Strategic supply chain performance management
- Performance measurement system and associated technology

- Cross-functional relationship management and inter-firm relationship management

You will be provided with the interview questions before the interview, to identify and confirm which questions you would like to respond to. The interview will be audio recorded. If you do not wish for recording to occur, please advise the Principal Investigator. It is possible to participate in the project without the interview being recorded.

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You may also request that any data collected from you be withdrawn and confidentially destroyed if the data has not yet been anonymised by the Principal Investigator. Once the data has been anonymised by the Principal Investigator, you will be unable to withdraw data collected from you. No personal details will be collected about you because the research is concerned with work-related processes. If you do wish to withdraw from this project or withdraw data collected from you, please contact the Principal Investigator (contact details at the top of this form). Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

Expected Benefits

The research will develop a Collaborative Strategic Supply Chain Performance Management (CSSCPM) Approach. The CSSCPM Approach will guide practitioners and firms how to consistently meet the needs of their key customers and key suppliers. Firms who achieve this become a valuable participant in the supply chain as they can win more work from key customers, attract the best suppliers and provide stable employment. The CSSCPM Approach will guide firms how to become a top performing firm. You will directly benefit by gaining insights into how top performing firms operate, through the summary of results. The summary of results and the CSSCPM Approach will provide you with a learning opportunity, from which you may use to continuously improve business practices and processes. More information about expected benefits is available upon request.

Risks

This research study has been designed to minimise the risk of inconvenience to you:
- An Interview Protocol will be used and strictly followed, and a timer used during interviews;
- You may change the interview date and time if required; or you may complete the online questionnaire instead or do both;
- You may nominate a substitute participant by first contacting the Principal Investigator.

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law. Data will be non-identified and will be provided as summary findings only. Only anonymised data will be included in published research papers and through conferences, seminars, presentations, journals and a pending book. The Principal Investigator will provide participants with access to the project summary of research results, in addition to providing participants with a copy of the CSSCPM Approach. Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy.

Consent to Participate

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate in this project. Please return your signed consent form to the Principal Investigator prior to participating in your interview.

Questions or Further Information about the Project

Please contact the Principal Investigator to have any questions answered or to request further information about this project (contact details at the top of this form).

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Manager of Research Integrity and Ethics on +61 7 4631 2214 or email researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research study and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research study. Please keep this sheet for your information.

Appendix F: Consent Form - Interview

University of Southern Queensland

Consent Form for USQ Research Project Interview

Project Details

Title of Project:	**Supply Chain Performance Management**
Human Research Ethics Approval Number:	H18REA149

Research Team Contact Details

Principal Investigator Details	**Supervisor Details**
Ms Sharyn Grant Email: […] Mobile: […]	Professor Jeffrey Soar Email: […] Mobile: […]

Statement of Consent

By signing below, you are indicating that you:

- Have read and understood the information document regarding this project. ☐Yes / ☐No
- Have had any questions answered to your satisfaction. ☐Yes / ☐No
- Understand that if you have any additional questions you can contact the research team. ☐Yes / ☐No
- Understand that the interview will be audio recorded. ☐Yes / ☐No
    - Understand that you can participate in the interview without being audio recorded. ☐Yes / ☐No
    - If you **do not want** to be audio recorded during the interview, please initial here: _____.
- Are over 18 years of age. ☐Yes / ☐No
- Agree to participate in the project. ☐Yes / ☐No

Participant Name	
Participant Signature	
Date	

Please return this sheet to the Principal Investigator prior to undertaking the questionnaire.

Appendix G: Participant Information - Questionnaire

University of Southern Queensland

Participant Information for USQ Research Project Questionnaire

Project Details

Title of Project:	**Supply Chain Performance Management**
Human Research Ethics Approval Number:	H18REA149

Research Team Contact Details

Principal Investigator Details

Ms Sharyn Grant
Email: […]
Mobile: […]

Supervisor Details

Professor Jeffrey Soar
Email: […]
Mobile: […]

Description

This project is being undertaken as part of a Doctoral Research Project. The Thesis is titled "Bringing corporate strategy to life through firm-wide alignment of strategic supply chain performance objectives".

The purpose of this project is to identify how executives at top performing firms in Australia cascade and rollout the corporate strategy and achieve alignment firm-wide to ensure that the firm performs as required within its strategic supply chains.

Participation

This research study seeks the participation of industry experts with:

1. Expertise in: (a) corporate strategy and/or (b) strategic supply chain management and/or (c) performance measurement systems and/or associated technology and/or (d) cross-functional relationship management and/or inter-firm relationship management; and
2. Experience and knowledge of firms in Australia with the following characteristics:

Firm Size	Firms with annual revenue greater than $100 million.
Nature of Business	Firms from any industry which have: a significant reliance on their inbound and/or outbound supply chains; and have strategic B2B relationships with key business suppliers and/or key business customers.
Top Performing	Firms regarded as top performing or best-in-class due to their consistency in increasing profit or increasing revenue or optimising costs or achieving other superior levels of performance.
Corporate strategy	Firms that have: • aligned their corporate strategy to the performance requirements of strategic supply chains and/or • aligned their strategic supply chain performance objectives with their corporate strategy and/or • rolled out their corporate strategy across the firm (typically via their performance system)
Firm-wide performance + measurement system	Firms that have a firm-wide performance measurement system that: • uses metrics that are aligned across the firm and are aligned to the corporate strategy and/or • is enabled by innovative performance management technology

Your participation can be anonymous and will involve completion of an **online questionnaire** that will require approximately **30-60 minutes** of your time. The questionnaire may be completed anytime during **December 2018 or January 2019 (or before 15 February 2019)**. The Principal Investigator will remain contactable in case you require clarification regarding any questions on the questionnaire. If you would prefer to be interviewed by Skype, please contact the Principal Investigator.

Questions are based on the following areas, but please only respond to questions pertaining to your expertise and experience:

- Corporate strategy
- Strategic supply chain performance management
- Performance measurement system and associated technology

- Cross-functional relationship management and inter-firm relationship management

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You may also request that any data collected from you be withdrawn and confidentially destroyed, if you have identified yourself on the questionnaire and if the data has not yet been anonymised by the Principal Investigator. Once the data has been anonymised by the Principal Investigator, you will be unable to withdraw data collected from you. No personal details will be collected about you because the research is concerned with work-related processes. If you do wish to withdraw from this project or withdraw data collected from you, please contact the Principal Investigator (contact details at the top of this form). Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

Expected Benefits

The research will develop a Collaborative Strategic Supply Chain Performance Management (CSSCPM) Approach. The CSSCPM Approach will guide practitioners and firms how to consistently meet the needs of their key customers and key suppliers. Firms who achieve this become a valuable participant in the supply chain as they can win more work from key customers, attract the best suppliers and provide stable employment. The CSSCPM Approach will guide firms how to become a top performing firm. You will directly benefit by gaining insights into how top performing firms operate, through the summary of results. The summary of results and the CSSCPM Approach will provide you with a learning opportunity, from which you may use to continuously improve business practices and processes. More information about expected benefits is available upon request.

Risks

This research study has been designed to minimise the risk of inconvenience to you:
- You may complete the questionnaire when convenient; or you may attend a Skype interview or a combination of both;
- You may nominate a substitute participant by first contacting the Principal Investigator.

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law. Only the Principal Investigator will have access to the research data. The USQ Survey Tool will be used to administer the online questionnaire. Data will be non-identified and will be provided as summary findings only. Only anonymised data will be included in published research papers and through conferences, seminars, presentations, journals and a pending book. The Principal Investigator will provide participants with access to the project summary of research results, in addition to providing participants with a copy of the CSSCPM Approach. Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy.

Consent to Participate

Clicking on the 'Submit' button at the end of the online questionnaire is accepted as an indication of your consent to participate in this project. A consent form for signature is available upon request.

Questionnaire Link

Please click on this link to commence the questionnaire: https://surveys.usq.edu.au/index.php/478352?lang=en
If you wish to complete the questionnaire via MS Word, please contact the Principal Investigator.

Questions or Further Information about the Project

Please contact the Principal Investigator to have any questions answered or to request further information about this project (contact details at the top of this form).

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Manager of Research Integrity and Ethics on +61 7 4631 2214 or email researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research study and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research study. Please keep this sheet for your information.

Appendix H: Consent Form - Questionnaire

University of Southern Queensland

Consent Form for USQ Research Project Questionnaire

Project Details

Title of Project:	**Supply Chain Performance Management**
Human Research Ethics Approval Number:	H18REA149

Research Team Contact Details

Principal Investigator Details	**Supervisor Details**
Ms Sharyn Grant Email: […] Mobile: […]	Professor Jeffrey Soar Email: […] Mobile: […]

Statement of Consent

By signing below, you are indicating that you:

- Have read and understood the information document regarding this project. ☐Yes / ☐No
- Have had any questions answered to your satisfaction. ☐Yes / ☐No
- Understand that if you have any additional questions you can contact the research team. ☐Yes / ☐No
- Are over 18 years of age. ☐Yes / ☐No
- Agree to participate in the project. ☐Yes / ☐No

Participant Name	
Participant Signature	
Date	

Please return this sheet to the Principal Investigator prior to undertaking the questionnaire.

Appendix I: Dynamic capabilities and microfoundations associated with *Research Issue 1: Corporate Strategy Formulation – a strategic supply chain focus*

Key Themes	**Sensing** *sense and shape opportunities and threats*		**Seizing** *seize opportunities*		**Transforming** *transform, reconfigure, and manage threats*	
	Dynamic Capabilities	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**
Theme 1: Strategic management-supply chain strategic alignment	Entrepreneurial (Teece 2009) Top management sensing importance of strategic supply chains Strategic supply chain sensing Customer orientation (Vijaya et al. 2019; Zhou & Li 2010)	Top management detecting the importance and value of the supply chain and of incorporating strategic supply chain considerations into corporate strategy Detect how supply chain can drive customer growth and satisfaction, and supplier and innovation initiatives Market monitoring - Market trends (Khan et al. 2020) Interpreting available information (Khan et al. 2020; Teece 2009) Identify how the firm will be impacted (Teece 2009)	Top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) Stakeholder management (Sodhi 2015) Corporate strategy formulation with a strategic supply chain focus Strategic supply chain decision-making	Building loyalty and commitment - Effectively communicating (Teece 2009) Seizing strategic supply chain opportunities while maintaining commitment of key supply chain-focused stakeholders Strategic planning to seize strategic supply chain opportunities and determine supply chain strategic objectives	Strategic management-supply chain strategic alignment Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007)	Decentralised strategic decision-making to bring top management closer to strategic supply chain elements Combining strategic management and strategic supply chain skills and knowledge Supply chain knowledge transfer to top management Corporate strategy-pre-supply chain strategy alignment
Theme 2: Developing strategic supply chain strategies	Entrepreneurial (Teece 2009) Strategic supply chain sensing Customer orientation (Vijaya et al. 2019; Zhou & Li 2010) Product portfolio management (Eggers 2012; Vijaya et al. 2019) Sensing threats (Teece 2009) Supplier orientation	Market monitoring - Market trends; Customer needs (Khan et al. 2020) Sensing opportunities for new products (Khan et al. 2020; Teece 2009) Predictive capability (Danneels 2008; Oliver & Holzinger 2008; Vijaya et al. 2019) Shaping opportunities and shaping markets (Teece 2009)	Top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) Stakeholder management (Sodhi 2015) Strategic supply chain strategies development for corporate strategy Strategic supply chain decision-making Inter-organisational collaboration (Fawcett et al.	Building loyalty and commitment - Effectively communicating (Teece 2009) Seizing strategic supply chain opportunities while maintaining commitment of key supply chain-focused stakeholders Developing customer-focused supply chain strategies to seize competitive opportunities Developing supplier-focused supply chain strategies to	Strategic management-supply chain strategic alignment	Decentralised strategic decision-making to bring top management closer to strategic supply chain elements Combining strategic management and strategic supply chain skills and knowledge Supply chain knowledge transfer to top management

Key Themes	Sensing *sense and shape opportunities and threats*		Seizing *seize opportunities*		Transforming *transform, reconfigure, and manage threats*	
	Dynamic Capabilities	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**
		Sensing strategic supply chain threats to competitive advantages Learning (Khan et al. 2020; Teece 2009) Processes to tap supplier innovation (Teece 2009) Interpreting available information (Khan et al. 2020; Teece 2009)	2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019)	seize competitive opportunities Strategic planning - Finding strategic partners (Khan et al. 2020) Selecting decision-making protocols - Avoiding decision errors (Teece 2009) Collaboration (Khan et al. 2020)		
Theme 3: Strategic supply chain configuration decision-making and planning	Entrepreneurial (Teece 2009) Strategic supply chain sensing Sensing threats (Teece 2009) Customer orientation (Vijaya et al. 2019; Zhou & Li 2010) Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019)	Market monitoring - Market trends; Technology scanning (Khan et al. 2020) Learning (Khan et al. 2020; Teece 2009) Sensing strategic supply chain threats to competitive advantages Interpreting available information (Khan et al. 2020; Teece 2009) Technology scanning - Customer needs; Technological developments (Khan et al. 2020) Detect how customers are shifting (Teece 2009) Sensing emergent technology threats (Khan et al. 2020; Patrício et al. 2019; Suddaby et al. 2019; Teece 2009; Vijaya et al. 2019)	Strategic supply chain configuration decision-making and planning Strategic supply chain performance transformation decision-making Top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) Stakeholder management (Sodhi 2015) Inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019) Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019)	Revenue architecture decision-making (Teece 2009) Selecting the technology architecture (Teece 2009) Strategic planning to seize strategic supply chain network opportunities Strategic planning to seize supply chain technology opportunities Building loyalty and commitment - Effectively communicating (Teece 2009) Seizing strategic supply chain opportunities while maintaining commitment of key supply chain-focused stakeholders Strategic planning - Finding strategic partners (Khan et al. 2020)	Strategic management-supply chain strategic alignment	Decentralised strategic decision-making to bring top management closer to strategic supply chain elements Combining strategic management and strategic supply chain skills and knowledge Supply chain knowledge transfer to top management

Key Themes	Sensing *sense and shape opportunities and threats*		Seizing *seize opportunities*		Transforming *transform, reconfigure, and manage threats*	
	Dynamic Capabilities	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**
		Sensing opportunities for new services (Khan et al. 2020; Teece 2009) Processes to identify target market segments (Teece 2009)		Collaboration (Khan et al. 2020)		
Theme 4: Strategic supply chain performance objectives	Entrepreneurial (Teece 2009) Strategic supply chain performance sensing Customer orientation (Vijaya et al. 2019; Zhou & Li 2010)	Idea generation - Brainstorming sessions (Khan et al. 2020) Scanning technological developments (Khan et al. 2020) Detecting strategic supply chain performance opportunities Sensing threats to services (Khan et al. 2020; Patrício et al. 2019; Suddaby et al. 2019; Teece 2009; Vijaya et al. 2019) Monitoring and sensing threats to strategic supply chain performance	Top executive's cognitive capability and style (Carpenter et al. 2001; Kor & Mesko 2013) Stakeholder management (Sodhi 2015) Strategic supply chain performance objectives development for corporate strategy Strategic supply chain performance management	Strategic planning and decision-making about strategic supply chain performance objectives Building loyalty and commitment - Effectively communicating (Teece 2009) Seizing strategic supply chain performance opportunities while maintaining commitment of key supply chain-focused stakeholders	Strategic management-supply chain strategic alignment Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007)	Decentralised strategic decision-making to bring top management closer to strategic supply chain elements Combining strategic management and strategic supply chain skills and knowledge Supply chain knowledge transfer to top management

Appendix J: Dynamic capabilities and microfoundations associated with *Research Issue 2: Corporate Strategy Cascading – to perform as required*

Key Themes	Sensing *sense and shape opportunities and threats*		Seizing *seize opportunities*		Transforming *transform, reconfigure, and manage threats*	
	Dynamic Capabilities	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**
Theme 5: Corporate strategy rollout			Corporate strategy cascading via deployment Corporate strategy deployment with a strategic supply chain focus Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Stakeholder management (Sodhi 2015)	Building loyalty and commitment - Demonstrating leadership; Effectively communicating (Teece 2009) Communicating goals (Sprafke et al. 2012; Teece 2009) Developing business plans, objectives, budgets, and metrics to deliver the corporate strategy to seize opportunities Seizing opportunities while maintaining commitment of key stakeholders (Suddaby et al. 2019)	Corporate strategy cascading via strategic alignment	Corporate strategy firm-wide alignment
Theme 6: Strategic performance alignment			Corporate strategy cascading via deployment Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) Metrics management (Hanson et al. 2011; Vijaya et al. 2019)	Translating strategic KPIs into operational metrics to guide actions (Conboy et al. 2020) Changing enterprise procedures to seize opportunities (Teece 2009) Governance (Teece 2009)	Corporate strategy cascading via strategic performance alignment	Strategic performance alignment of corporate strategy with a strategic supply chain focus Supply chain strategy alignment to corporate strategy

Key Themes	Sensing *sense and shape opportunities and threats*		Seizing *seize opportunities*		Transforming *transform, reconfigure, and manage threats*	
	Dynamic Capabilities	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**
Theme 7: Strategic performance management system technology	Firm and supply chain performance monitoring and reporting Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019)	Monitoring internal developments (Sprafke et al. 2012) Technology scanning - Technological developments (Khan et al. 2020)	Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Stakeholder management (Sodhi 2015) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Building loyalty and commitment - Effectively communicating (Teece 2009) Seizing opportunities by mobilising significant financial resources (Suddaby et al. 2019)	Corporate strategy cascading via strategic performance management system technology Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019) Training and development (Azadegan et al. 2008; Vijaya et al. 2019) Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007)	Corporate strategy alignment using performance system technology Technological upgradation (Khan et al. 2020) Improving strategic performance management through upgrading performance system technology Knowledge integration - Training of employees (Khan et al. 2020) Knowledge management - Learning (Teece 2009) Reconfiguring capabilities to cope with technology change (Kareem & Alameer 2019; Khan et al. 2020; Suddaby et al. 2019; Teece 2009)
Theme 8: Cross-functional relationships and alignment	Process management (Benner & Tushman 2015; Vijaya et al. 2019; Zollo & Winter 2002)	Internal process sensing - Identifying internal inefficiencies (Conboy et al. 2020)	Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Stakeholder management (Sodhi 2015) Project and program management (Anand et al. 2009; Mosey 2005; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Building loyalty and commitment - Demonstrating leadership; Effectively communicating (Teece 2009) Communicating goals (Sprafke et al. 2012; Teece 2009) Seizing opportunities while maintaining commitment of key stakeholders (Suddaby et al. 2019) Mobilising resources to seize opportunities (Khan et al. 2020; Teece 2007, 2009)	Cross-functional relationship management and alignment Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007)	Strategic management-cross-functional relationships and alignment Cross-functional collaboration and alignment Combination skills and combination of know-how within the enterprise (Teece 2009) Cross-functional champions Cross-functional process management

Key Themes	Sensing *sense and shape opportunities and threats*		Seizing *seize opportunities*		Transforming *transform, reconfigure, and manage threats*	
	Dynamic Capabilities	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**
Theme 9: People performance strategic alignment			Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Developing individual performance objectives to deliver corporate strategy Developing team performance objectives to deliver corporate strategy	People performance strategic alignment Training and development (Azadegan et al. 2008; Vijaya et al. 2019) Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007)	Individual performance strategic alignment Individual performance strategic alignment using performance system technology Governance - Achieving incentive alignment (Teece 2009) People development strategic alignment Team performance strategic alignment
Theme 10: Addressing behavioural issues	Strategic performance behaviour sensing Process management (Benner & Tushman 2015; Vijaya et al. 2019; Zollo & Winter 2002) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Sensing behavioural issues related to the strategic performance management system Sensing how individuals respond to performance management Sentiment sensing (Conboy et al. 2020) Sensing behavioural issues related to the strategic performance management system technology	Strategic performance behaviour management Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019) Stakeholder management (Sodhi 2015) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Adopting proactive strategies to minimise behavioural issues related to the strategic performance management system Seizing opportunities by overcoming resistance to change (Kareem & Alameer 2019; Khan et al. 2020) Adopting proactive strategies to minimise behavioural issues related to the strategic performance management system technology Building loyalty and commitment - Recognising non-economic factors, values, and culture (Teece 2009)	Training and development (Azadegan et al. 2008; Vijaya et al. 2019) Knowledge management capability (Smart et al. 2007; Vijaya et al. 2019; Wang & Ahmed 2007) Organisational values and culture alignment	Knowledge integration - Training of employees (Khan et al. 2020) Knowledge management - Learning (Teece 2009) Aligning behaviours with the values and culture of the firm

Key Themes	Sensing *sense and shape opportunities and threats*		Seizing *seize opportunities*		Transforming *transform, reconfigure, and manage threats*	
	Dynamic Capabilities	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**	**Dynamic Capabilities**	**Microfoundations of Dynamic Capabilities**
Theme 11a: Supply chain relationships and alignment with strategic customers	Strategic supply chain sensing Customer orientation (Vijaya et al. 2019; Zhou & Li 2010) Customer relationship management (Barrales-Molina et al. 2014; Vanpoucke et al. 2014; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Monitoring internal developments (Sprafke et al. 2012) Processes to identify changing customer needs (Teece 2009) Detect how customers are shifting (Teece 2009) Market monitoring - Customer needs (Khan et al. 2020) Customer-focused external environment monitoring External process sensing (Conboy et al. 2020)	Customer relationship management (Barrales-Molina et al. 2014; Vanpoucke et al. 2014; Vijaya et al. 2019) Inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019)	Strategic customer relationship performance management Collaboration (Khan et al. 2020)	Strategic supply chain performance alignment Customer relationship management (Barrales-Molina et al. 2014; Vanpoucke et al. 2014; Vijaya et al. 2019) Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019)	Process integration with strategic customers enabled by technology Real-time process reconfiguration (Conboy et al. 2020)
Theme 11b: Supply chain relationships and alignment with strategic suppliers	Strategic supply chain sensing Supplier orientation Supplier relationship management Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007)	Monitoring internal developments (Sprafke et al. 2012) Supplier-focused external environment monitoring Supplier performance measurement External process sensing (Conboy et al. 2020)	Supplier relationship management Inter-organisational collaboration (Fawcett et al. 2011; Kleinbaum & Stuart 2014; Vijaya et al. 2019) Performance management (Hanson et al. 2011; Vijaya et al. 2019; Wang & Ahmed 2007) Strategy execution capability (Harreld et al. 2007; Vijaya et al. 2019)	Strategic supplier relationship performance management Collaboration (Khan et al. 2020)	Strategic supply chain performance alignment Supplier relationship management Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019) Managing threats (Teece 2009)	Process integration with strategic suppliers enabled by technology Real-time process reconfiguration (Conboy et al. 2020) Technological upgradation (Khan et al. 2020) Managing strategic supply chain threats to competitive advantages

Appendix K: Dynamic capabilities and microfoundations associated with *Strategic Supply Chain Performance Transformation*

Strategic Supply Chain Performance Transformation		**Transforming** *transform, reconfigure, and manage threats*	
		Dynamic Capabilities	**Microfoundations of Dynamic Capabilities**
Strategic supply chain reconfiguration	Implementing supply chain network decisions (including manufacturing) to transform the supply chain network	Resource management (Sirmon & Hitt 2009; Vijaya et al. 2019) Strategic supply chain reconfiguration Strategic supply chain performance transformation Outsourcing capability (Scherrer-Rathje et al. 2014; Vijaya et al. 2019)	Maintain competitiveness through reconfiguring supply chain resources Maintain competitiveness through supply chain rationalisation Reconfiguring operations from in-house to outsourcing
	Implementing enterprise-wide IT and decision support systems decisions to transform internal technology requirements and practices	Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019) Strategic supply chain performance transformation	Technological upgradation (Khan et al. 2020) Reconfiguring assets to cope with firm growth (Kareem & Alameer 2019; Khan et al. 2020; Suddaby et al. 2019; Teece 2009) Reconfiguring capabilities to cope with technology change (Kareem & Alameer 2019; Khan et al. 2020; Suddaby et al. 2019; Teece 2009) Best practices adaptation - New business practices; New work methods (Khan et al. 2020) Reconfiguring operations from in-house to outsourcing
	Implementing supply chain technology decisions (including data integration) to transform supply chain technology requirements and practices	Information technology management (Anand et al. 2009; Fawcett et al. 2011; Vijaya et al. 2019) Strategic supply chain performance transformation	Reconfiguring strategic supply chain capabilities to cope with technology change Improving strategic supply chain practices